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Separation-Individuation in Young Adulthood: Attachment Patterns, Family Cohesion, and Mental Health Considerations

by

Jason Edgerton ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Education

in

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Separation-Individuation in Young Adulthood: Attachment Patterns, Family Cohesion, and Mental Health Considerations* by Jason Edgerton in partial fulfillment of the requirements for the degree of Master of Education in Counselling Psychology.

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Dedication

This thesis is dedicated to my parents, Dennis and Pat Edgerton, and my grandmothers, Helen Edgerton and Julia Chartier—all whom I'm sure more than once wondered if I'd ever finish. Well here it is. As well, I would like to dedicate this to the memory of my grandfather, Merle Edgerton, who I never knew as well as I would have liked.

Abstract

This study examined the relationship between adult attachment style, attachment to parents, normal and pathological separation-individuation, family cohesion, "positive illusions" and adjustment to college in a group of undergraduates (102 females; 51 males). It was found that secure adult attachment style predicts less pathology in separation-individuation, while preoccupied and fearful styles predict greater pathology. Secure adult attachment style is predicted by greater family cohesion, while fearful and preoccupied styles are predicted by less family cohesion. Secure attachment style predicts better social and emotional adjustment to college, while fearful and preoccupied styles predict poor emotional adjustment. Evidence was found for the "continuity of adaptation" hypothesis, in that secure adult attachment is predicted by more secure attachment to father, dismissing style is predicted by more secure attachment to mother, while fearful style is predicted by more insecure attachment to both parents. Insecure attachment to father predicts poor emotional and social adjustment to college, insecure attachment to mother predicts poor social adjustment to college. Secure attachment to parents predicts better social adjustment to college. Results also show that personal fable feelings of omnipotence and invulnerability are "positive illusions" that are more likely in males, and which predict secure adult attachment, more secure attachment to parents, better emotional and social adjustment to college, and less pathological separation. The validity of Christensen and Wilson's (1985) measure of pathological separation was supported. Unexpectedly, pathological and "normal" separation were not significantly related. It appears that Hoffman's (1984) PSI might not measure "normal" separation from parents, but rather disengagement from them. Implications for further research are discussed.

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Introduction

The main purpose of this study is to demonstrate the relationship between attachment and the separation-individuation process. In the first chapter I overview the separation-individuation literature. Separation-individuation is an important developmental process that begins in infancy, continues into adolescence, and has ramifications over the lifespan—particularly during times of major life transition. Separation-individuation is not just about movement toward autonomy and individuality, away from parental dependencies and emotional entanglements. It is about moving toward autonomous ego functioning within the context of ongoing relationships (Josselson, 1980). It is about striking a mature balance between one's sense of self and one's sense of connectedness. Individuation requires a reworking of the pattern of family relationships, such that it encourages autonomy and individuality, but not at the expense of close family ties.

Separation-individuation in childhood involves separation from the constant physical presence of mother and the internalization of "portable" parental (object) representations. In adolescence separation-individuation involves transcending these infantile object ties and distancing one's self from parental introjects in order to establish clear autonomous ego boundaries. This transition is often accompanied by defensive narcissistic inflation in which the adolescent is prone to overestimating their qualities and capabilities.

The construct of "personal fable" has previously been used to explain various forms of adolescent risk-taking (Elkind, 1967). Lapsley (1993) argues that personal fable feelings of omnipotence and invulnerability are, in fact, "positive illusions" that serve an adaptive restitutive function as the adolescent makes the transition from dependence upon parental introjects to autonomous ego functioning.

Successful separation-individuation depends upon the satisfactory resolution of the rapprochement crisis (Quintana & Lapsley, 1990). The rapprochement drama unfolds as the adolescent is forced to reconcile the need for separateness and autonomy with the need for connectedness and support. The individuated person is able to achieve a mature balance that fosters both a strong sense of self and strong sense of relatedness.

In the second chapter I overview the literature on attachment theory. Attachment theory emphasizes the importance of a child's relationship with their caregiver. It is from our interactions in this primary relationship that we come to form mental representations about ourselves and the world around us. The securely attached individual has positive "internal models" of the self and of others; they see themselves as valued and worthy of others, and see others as generally responsive and caring (Bartholomew & Horowitz, 1991).

Attachment style is fairly stable across the lifespan (e.g. Elicker, Englund, and

Sroufe, 1992; Rothbard & Shaver, 1994). The continuity of one's attachment style depends on the operation of internal working models. Internal working models operate much like other social-cognitive structures; they affect how we process information, they are arranged hierarchically in terms of abstractness, this organization can vary in terms of coherence, and they tend to be self-confirming. Adults with positive models of self and others are said to have a secure adult attachment style. The secure adult is comfortable with intimacy and autonomy (Bartholomew, 1990).

Thus, it seems that the securely attached adult and the individuated adult share similar characteristics: the mature integration of autonomy and connectedness. In the latter part of chapter two I look at parallels and linkages between the two bodies of literature that suggest separation-individuation and attachment processes are related. It is proposed that, at the "level of internal representation," what the rapprochement drama involves is a reconditioning of one's model of self (separateness) and one's model of other (connectedness.)

In the final section of chapter two I posit the questions under study: 1) What is the relationship between adult attachment and separation-individuation? 2) Is this relationship mediated by family variables such as family cohesion and attachment to parents? 3) Are feelings of invulnerability and omnipotence "positive illusions" that promote successful separation-individuation and mental health in general? 4) Is attachment to parents related to adult attachment style, adjustment to college, and separation-individuation? (This is a test of the "continuity of adaptation" hypothesis.) 5) Is Christensen and Wilson's (1985) inventory for assessing adult manifestations of pathology in the separation-individuation process valid?

In chapter three the method and instruments employed for the study are presented. The results of the statistical analyses are explicated in detail in chapter four. In chapter five each of the five main questions are addressed in light of the data. Methodological concerns are acknowledged, links are made between the various questions, and implications for further research are discussed.

Chapter 1

Separation-Individuation

Separation-individuation is a critical developmental task that has numerous adaptational consequences for adolescents and young adults. It is a cumulative process involving the increasingly complex integration of self-awareness, identity and relationship. This process often requires periods of defensive narcissism and regression to earlier levels of psychic organization as precondition to advancement to higher levels of organization. Fundamental individuation issues that play themselves out in infancy may be revisited, in revised form, again later in adolescence, and in fact, throughout life.

The first separation-individuation phase, as detailed by Margaret Mahler (Mahler, Pine, & Bergman, 1979) and her colleagues, begins in infancy and is sometimes referred to as the psychological "hatching" of the child. According to Mahler, the separation-individuation process is precipitated by a symbiosis phase in which the mother and infant experience close attunement and mutuality. It is in this phase that the infant initially feels pleasure in interaction, gains a sense of confidence and basic trust in their caregiver and their own agency. In the differentiation subphase the infant begins to explore their surroundings and self-object distinctions begin to emerge. In the practicing subphase, the child gains increasing mastery over their body, psychomotor development permits more active exploration of their environment, and so the child begins to venture further from mother (who serves as a "safe anchorage"). Flushed with their emerging sense of omnipotence, their investment in mother lessens, initially, but as they become frustrated by their environment, their confidence wanes, and as awareness of the reality of their limits and their separateness from mother grows, they retreat back to closeness with mother ("emotional refuelling"). This is the rapprochement subphase, where the child still seeks autonomy but now seeks closeness at the same time, wanting mother to share in all their activities. Resolution of the rapprochement issue ushers in the fourth subphase, characterized by internalization of parents, and the achievement of self and object constancy.

Peter Blos (1962) first introduced the idea of adolescence involving a "second individuation" process. The first individuation phase, as described above, concerns the disengagement from the constant physical presence of mother and the internalization of parental representations. In the second individuation phase, the adolescent must transcend infantile object ties, and gain distance from parental introjects in order to establish clear ego boundaries and adult autonomy. Blos (1967) asserts that successful disengagement requires decathexis of infantile love and hate objects, so that libido can be turned outward in search of age-appropriate object gratification within the broader social context. Important

to this process is that the ego assume the functions that were formerly dependent on parental introjects, such as regulation of self-esteem and guilt. He notes that such a transition may involve some initial exaggeration of "autonomous" behaviour as the ego asserts its new office. He writes:

> We observe in adolescence that the object libido—in varying degrees to be sure—is withdrawn from outer and inner objects and is converted into narcissistic libido by being deflected onto the self. This shift from object to self results in the proverbial self-centredness and self-absorbtion of the adolescent who fancies himself to be independent from the love and hate objects of his childhood. The flooding of the self with narcissistic libido has the effect of self-arrandizement and an overestimation of the powers of body and mind. This condition affects reality testing adversely (1967; 166).

According to Blos (1976, 1979), "regression in the service of the ego" is a necessary precondition of the second individuation phase. In order for the necessary reorganization to take place, the old ego organization must loosen, resulting in a temporary state of fragmentation and disorientation. Thus the adolescent is forced to re-encounter infantile ego states. If initial ego organization (the result of the first individuation phase) is robust enough the individual will continue on into the drive and ego reorganization characteristic of secondary individuation, if initial ego organization is lacking, the individual will be mired in a developmental impasse until the defective ego organization is appropriately redressed. Such defective ego structure manifests in corresponding drive fixations and infantile object dependencies.

Thus any issues that were not satisfactorily resolved in the first individuation phase will be revisited in adolescence. Following Blos (1979), Josselson (1980) holds that the separation-individuation themes of childhood are recapitulated in adolescence. She writes:

> The dynamics of adolescent individuation are strikingly parallel to the process described by Mahler and her associates. Although the outcome of the early individuation phase is structuralization, it is not unlikely that the massive structural modification that takes place in adolescence repeats the process of the original structure formation (p. 193).

According to Josselson (1980), initially the latency period of late childhood is a time of relative psychic harmony, almost symbiotic in nature, as the child seems to revel in the symmetry of its own and its parents' ego functioning. While the child has a sense of their own separateness and uniqueness they are still realistically and emotionally dependent upon their parents. Josselson suggests that early adolescence witnesses the re-emergence

of a sense of omnipotence—as the youngster basks in feelings of autonomy and separateness. The child most easily evokes these self-sensations by engaging in oppositional behaviours, or antagonistic flexing of the will. What better way to differentiate oneself, to prove one's significance than to frustrate the will of others, to say "no" or to do the opposite of what is requested of one. Thus in addition to cultivating and refining motor skills, practicing in latency has a large symbolic component integral to the child's burgeoning sense of individuality. These processes command the latency period until it is breached by the reassertion of drives at puberty.

Vacillating affect and a concomitant ambivalence over autonomy precipitate a second rapprochement crisis in which, according to Josselson, the adolescent is torn between the simultaneous desire for separateness and closeness. As in the initial individuation phase, where the omnipotent infant is humbled into rapprochement with mother by the realization of his physical limits in relation to his environment, the adolescent's celebration of his autonomy and separateness is soon inverted by the existential realization of the negative aspects of separateness. The adolescent now desires refuge from this inner loneliness and, as with the shadowing and clinging behaviour of the young child, seeks symbiotic union, sharing of ego experiences, and parental approval. At the same time, wary of engulfment, the adolescent continues to dutifully defy his parents in the name of independence. The adolescent wishes simultaneously for both distinctness and approval.

Resolution of the rapprochement drama hinges on the adolescent's ability to reconcile their burgeoning individuality with mature forms of relatedness. The adolescent must now sustain interpersonal relations while simultaneously decathecting the object world. It is not with ease that the adolescent gives up the desire for omnipotent love objects. The ego organization must be reconstituted such that the idealized parental introjects of the superego are displaced by realistic ego-mediated content. "The love of the omnipotent parent, previously structuralized in the superego, must be replaced by love of the self or the possible self" (Josselson, 1980; 1988). The ego must come to supplant the superego as the seat of self-esteem and conscience. As Blos (1976) points out, this transition involves some ego uncertainty, and so does not occur without a certain degree narcissistic compensation. That is, an initial exaggeration of confidence and autonomous behaviour, a narcissistic puffing up of self-esteem until the reality ego begins to stabilize and grow into its constitutive role.

Josselson (1980) observes that the peer group plays an important role in providing an alternative base of ego support for the adolescent as he explores sources of identity beyond the family (the individuation process will later repeat itself with respect to peers). Leaving object representations behind requires the accrual, through varied experience, of independent integrated self-representations. Expanding one's social world is particularly

important for providing new opportunities for ego-sharing experiences, identifications, and ego-confirmation from beyond the parental-superego realm. Elements of the practicing subphase are recapitulated in early adolescence (Josselson, 1980). But practicing in adolescence occurs largely on a symbolic level. As with the proximity of mother to the toddler, narcissistic inflation provides the adolescent with an interim sense of "safe anchorage" from which to explore the unfurling world of possible relations and identifications. At this time, as Josselson (1980; 198) notes, "[t]ransient, experimental identifications are adopted to test their workability as stabilizing mechanisms." Affect and fantasy come to the forefront as the adolescent fleshes out emerging self-representations. The adolescent must move towards harmonization of object relations and self-representations both internally and in relation to reality experience.

Lapsley (Lapsley & Rice, 1988; Lapsley, 1993) has argued that what Blos (1962, 1976, 1979) and Josselson (1980, 1988) term "object relational ideation" in this process, might be better understood using the related but more parsimonious twin constructs of "imaginary audience" and "personal fable." Imaginary audience refers to the adolescent tendency to see the self as the object of others' attention, and to anticipate the reactions of others to the self in real and imagined scenarios. The imaginary audience is commonly thought to underlie certain adolescent peculiarities such as extreme self-consciousness, shyness, reticence, faddish dress, and attention-seeking behaviour. Personal fable refers to the adolescent tendency to construct fables about the self that emphasize personal uniqueness, omnipotence, and invulnerability. It is often used in the explanation of adolescent risk-taking behaviours.

Lapsley suggests that imaginary audience and personal fable ideations are necessary adaptive features of the separation-individuation process, of particular relevance during the rapprochement crisis. Lapsley (1993) asserts that the imaginary audience:

> is a form of object relational ideation that allows the adolescent to maintain interpersonal connectedness during the course of psychological separation, even if only in imagination. The construction of imaginary audiences and visions of the self in various interpersonal scenarios serves defensive and restitutive functions. They constitute trial actions, make-believe relationships that prepare the adolescent for mature connectedness (p. 567).

That is, they allow the adolescent to engage in symbolic practicing, exploring the world of hypothetical identifications, relations, and self-representations.

Blos (1962; 98) talked of the importance of "self-induced ego states of a poignant internal perception of the self" as being important to establishment and maintenance of distinct ego boundaries. Such grandiose visions of the self are also characteristic of

personal fable ideation. Josselson (1980) has suggested that during this time of ego ambivalence the adolescent may seek affective confirmation of the self through behaviours that evoke intense here-and-now feelings. Risk-taking behaviours certainly seem to fall into this category, and again we can see the usefulness of the personal fable construct for explaining such thralls of self-experience.

Josselson (1988: 94) stresses that successful separation-individuation:

> does not require that the relationships be obliterated in the interest of gaining autonomy; rather, separation modifies relationship. Separation-individuation is one side of the matrix that connects individuals. When we look at the separation side, we see individuals moving away from someone. But when we turn the matrix over to view its other side, we see the separating individual revising, and thus preserving the relationship...Much of the pain of adolescence is in this effort at rapprochement, the fear of putting separation-individuation and relationship at odds.

During this time of ego flux, positive illusions in the form of imaginary audience and personal fable ideations fulfill important ego buffering functions. Lapsley (1993; 566) claims that, "[imaginary audience] reflects the themes of connectedness and communion and the [personal fable] expresses the concern for agency and assertion." Furthermore Lapsley contends that these positive illusions are not exclusive to adolescence, and in fact may resurface in response to object loss and narcissistic injury over the course of the lifespan.

The familial context plays an important role in this rapprochement drama. The ongoing dialectic between individuation and connectedness necessitates a reworking of the pattern of family relationships and autonomy without threatening close familial ties. Successful resolution of the rapprochement crisis involves striking a mature balance (Quintana & Lapsley, 1990) between enmeshment with family patterns, and conformity to parental expectations and identifications, on the one hand, and complete disengagement and isolation on the other. Individuation involves an evolution from asymmetrical, dependent relationships with significant others to more symmetrical, mutual, and interdependent "adult" relationships (Anderson & Sabatelli, 1990).

Families characterized by a healthy degree of differentiation foster individuation by allowing the adolescent enough opportunity for age-appropriate, independent exploration and experimentation, while simultaneously providing good-enough support and guidance. The key is that the family be flexible enough to adapt and modify as required. In contrast the insufficiently differentiated family is characterized by a stultifying inertia, and has great difficulty accommodating adolescent individuation, viewing moves toward independence

and emotional maturity as disloyal to the family system (Allison, & Sabatelli, 1988).

Bakan (1966) points out that human development across the lifespan is a dialectic between the agentic and communal aspects of the self. At times, agentic urges predominate: self-assertion, mastery, self-expansion, distinctness and separateness. At other times communion needs come to the forefront: connection, co-operation, dependence. Thus, while adolescent separation-individuation may be a time when this dialectical tension is particularly strong, it seems that the import of separation-individuation extends far beyond childhood and adolescence, and that variations of the rapprochement drama may even play out periodically later in life.

The separation-individuation process is particularly salient during the transition to college when the young adult is faced with numerous adaptational challenges (Henton, Lamke, Murphy, & Haynes, 1980). Indeed, the relationship between separation-individuation and adjustment to college has been widely documented using various instruments (e.g., Hoffman, 1984; Lapsley et al., 1989; Quintana & Kerr, 1993; Rice, Cole, & Lapsley, 1990). A brief review of some of these instruments and the findings obtained using them would be beneficial to our purpose.

Measuring Separation-Individuation

The abundance of studies on separation-individuation has been precipitated by the abundance of instruments constructed to measure the phenomenon. I will contain the discussion to three of the more commonly used ones. Hoffman (1984) developed the 138-item Psychological Separation Inventory (PSI). In the PSI, psychological separation is defined by four dimensions: functional independence (ability to manage and direct one's practical and personal affairs without parental intervention); attitudinal independence (image of oneself as being unique and having attitudes, opinions and beliefs at variance with parental attitudes); emotional independence (freedom from excessive need for approval, closeness and emotional support); and conflictual independence (freedom from excessive guilt, resentment, anxiety). These four dimensions are derived as subscales, which are reported independently for Mother and Father. The PSI is widely used and appears to have acceptable factor structure and psychometric properties (Lopez & Gover, 1993).

Hoffman (1984) found that both emotional independence and conflictual independence predicted personal and academic adjustment in college. Hoffman and Weiss (1987) found that problematic separation from parents (conflictual dependence) was associated with reported emotional problems in college students. In a cross-sectional study, Lapsley, Rice, and Shadid (1989) used the PSI to compare freshman with upperclassmen. As expected, Lapsley et al. (1989) found age-related advances in

psychological independence. But, unexpectedly, freshman only reported less independence on five of eight dimensions, and in fact, reported greater conflictual independence from their fathers than did upperclassmen. In a longitudinal study, Rice (1992) found that both men and women showed increases in functional, emotional, and conflictual (but not attitudinal) independence from both parents.

The Separation-Individuation Test of Adolescence (SITA; Levine, Green, & Millon, 1986) is derived (following Josselson, 1980, 1988) from Mahler's subphases of individuation applied to the adolescent experience; it assesses the role of separateness and connectedness in supportive and nonsupportive forms of relationship. Although the parent-adolescent relationship is primary, the SITA also evaluates other significant relationships, such as those involving peers or authority figures. The SITA has seven scales, three of which—Healthy Separation, Nurturance-Symbiosis, Self-Centredness—evaluate supportive forms of relationships. Healthy separation is dependent on the gratification of both separation and connectedness needs. Nurturance-Symbiosis is dependent on participation in relationships in which nurturance needs are gratified. Self-Centredness depends on participating in relationships that gratify the adolescents' needs for admiration, validation, and respect. Four SITA scales assess participation in nonsupportive relationships: Separation Anxiety reflects discomfort during separation experiences; Denial of Dependency reflects a tendency to avoid close relationships and deny needs for connectedness; Rejection Expectancy reflects a history of experiencing rejection, and expectations for the same in the future; and Engulfment Anxiety reflects a tendency to avoid close relationships that might constrain one's independence. Studies have demonstrated support for the SITA's construct and factor validity (Levine, Green, & Milton, 1986; Rice et al., 1990). Reported alpha coefficients have ranged from .68 to .82 (Papini et al., 1989; Rice et al., 1990).

Using the SITA and a measure of psychological complaints, Quintana and Kerr (1993) found that students' involved in supportive relationships with parents, authority figures, and peers tended to report less depression. In contrast, students involved in nonsupportive relationships were more likely to report depressive symptoms. Gratification of nurturance and dependency needs appeared more important for women, but men tended to show greater engulfment anxiety, which the authors suggest may be understood in terms of defense against dependency needs.

The SAT is a structured, projective test that requires subjects to respond to 12 pictures of a child in separation scenes of varying intensity. After viewing each picture, the subject completes multiple choice sentence stems. It is assumed the subjects will project their own feelings about separation onto their answers. The Individuation subscale of the SAT contains items that reflect positive, optimistic outlooks with regard to separation scenarios. The SAT has adequate reliability (Rice et al., 1990). The SAT has been used to

demonstrate the positive association between psychological individuation and identity exploration in college (Kroger, 1985; Kroger & Haslett, 1988) and the negative relation between individuation and separation defensiveness and depression among college students (Levitz-Jones & Orlofsky, 1985).

If these various instruments are, in fact, tapping into aspects of separation-individuation, then it should be possible to identify some common underlying factors. In one study, Rice et al.(1990) showed by means of structural modelling techniques, that underlying these measures of psychological individuation are two related dimensions: 1) a felt sense of independence from parents (ability to manage daily responsibilities, freedom from the need of parental approval and emotional support, having attitudes and beliefs distinct from parental attitudes/beliefs), and 2) positive feelings associated with parental separation. Only the latter dimension was associated with college adjustment. That is, the process of gaining independence from parents appears to be unrelated to adjustment. In contrast, students who report positive feelings about separation also report being well-adjusted to university life. Conversely, students who reported negative, angry and resentful separation affect showed a poorer profile of adjustment. What is more, this study also showed that family cohesion was negatively related to the "independence" dimension of separation-individuation (standardized path coefficient = -.51).

There are, of course, numerous questions left unaddressed by the extant research on the dynamics of separation-individuation. In the Rice et al. (1990) study, for example, the finding that family cohesion is unrelated to college adjustment is potentially anomalous. The literature is quite clear, for example, that the lack of family cohesiveness is a robust predictor of adolescent psychopathology (Kashani et al., 1994; Friedrich, Reams, & Jacobs, 1982; Reinherz et al., 1989). Adolescents who come from families that are disorganized, conflicted and under stress are at particular risk (Garrison et al., 1991; Marttunen, Aro & Lonnqvist,1993; Adams, Overholser & Lehnert, 1994). Hence it seems odd to conclude that cohesiveness should play no role at all in college adjustment. It is also interesting that family cohesion failed to predict "positive separation feelings" as well.

In this unselected community ("normal") sample of late adolescents and young adults, then, family cohesion was unrelated to college adjustment and unrelated to an important dimension of separation-individuation. It may well be the case that family cohesiveness is a protective factor only among high risk youth. In other words, within samples of otherwise well-functioning individuals family cohesion may convey no particular advantage. Although family cohesion was negatively related to the dimension "independence from parents," this finding was treated rather benignly by the authors. It was interpreted as the sort of normal disruption of family cohesiveness that rapprochement and healthy ego development require.

Positive Illusions and the Transition to College

Could such disruption be related to the so-called "positive illusions" that are thought to accompany this ego developmental task? Recall what Blos (1967; 166) said about the adolescent task of disengaging from infantile object ties and replacing them with real world ones: This involves the ego asserting itself over parental internalizations and may initially result in "self-aggrandizement and an overestimation of the powers of body and mind." Lapsley (1993) has similarly argued that an adolescent's heightened sense of personal omnipotence and invulnerability (a personal "fable") is a compensatory, defensive manoeuvre characteristic of individuals who are undertaking the individuation process. Indeed, previous research (Lapsley et al., 1988) has documented an empirical relationship between personal fable ideation and separation-individuation in samples of younger (non-university) adolescents.

In a recent study Lapsley and his colleagues (Lapsley, Flannery, Gottschlich, & Raney, 1996) showed that these twin aspects of personal fable ideation (omnipotence, invulnerability) have decided mental health consequences. In a sample of 561 adolescents it was shown that the sense of "omnipotence" (and narcissism) appears to inoculate teens from internalizing symptoms (suicidal ideation, depressive symptoms) and promote many aspects of positive adjustment (self-worth, mastery/coping, superior adjustment). Invulnerability, in contrast, was a consistent risk factor for externalizing behaviours (fighting, vandalism, substance abuse, and other risky delinquent behaviours). It was unrelated to positive adjustment, and conveyed only a modest protective effect against internalizing symptoms.

In this study Lapsley et al. (1996) drew an explicit parallel between these personal fable ideations (particularly "narcissistic omnipotence") and the so-called "positive illusions" (see Taylor & Brown, 1988) which are also thought to convey numerous mental health advantages. Although the putative relationship between positive illusions (e.g. unrealistically positive self-evaluations, exaggerated perceptions of control/mastery, and unrealistic optimism) and mental health has become contentious (Colvin & Block,1994; Taylor & Brown, 1994), there is consensus, nonetheless, that research must address the question across a wider range of relevant constructs. It would be informative to document this hypothesized relationship in a sample of late adolescents and young adults, using measures of separation-individuation that are novel to this question. Since for many young adults, it is their first time away from home for any prolonged period, the transition to college is again a new proving ground for the self and as such might compel the revisiting of certain separation-individuation issues. Of particular interest to us might be the relationship between personal fable ideation as a coping mechanism, and various indices of college adjustment.

Summary

What is at stake then, in the separation-individuation process, is the striking of a balance between separateness and connectedness. The successfully individuated person has an integrated sense of their separateness and connectedness, and is able to engage fully in relationship without detriment to their sense of self and, vice versa, is able to fully experience the self without detriment to relationship. This balancing act begins in infancy, and by the end of the first separation-individuation phase the child should have achieved the first level of integration. In adolescence the separation-individuation process is recapitulated, and by the end of the rapprochement stage, the adolescent should arrive at another higher, more mature, level of integration. Family structure and the transition to college can play an important role in this rapprochement drama, and as such have been much studied. The outcome of the rapprochement crisis is reflected in the individual's subsequent levels of integration, and it may be re-visited later in life during times of significant transition. Thus the separation-individuation process has relevance across the lifespan. This lifespan perspective is also very important in the attachment literature, to which we turn next.

Chapter 2

Attachment Theory

The main purpose of this chapter is to outline areas of convergence and complementarity between attachment theory and the separation-individuation process in the hope that the two frameworks might each better inform the other's understanding of adolescent development. Attachment theory (Bowlby, 1969; 1973; 1980; Ainsworth, 1970; Ainsworth, Blehar, Waters, & Wall, 1978) concerns itself with the nature of humans in relationship across the lifespan. Attachment theory originated from John Bowlby's pursuit of a biologically-rooted account of human motivation as an alternative to Freudian drive theory (Mitchell, 1988). Bowlby gained a grounding in object relational ideas while studying under Melanie Klein at the British Psychoanalytic Institute. But unsatisfied with what he saw as her lack of emphasis on family interaction patterns—particularly mother-child—he broke off to form his own research unit. Bowlby's (e.g. 1951) writing at the time still used psychoanalytical terms (love object, libidinal ties, ego, and superego), but his ideas were already extremely divergent from Freudian orthodoxy. Unhappy with prevailing psychoanalytic views, Bowlby drew from other disciplines. He borrowed the idea of "critical period" from embryology, and such ideas as activating and terminating social stimuli (signs or cues that release and shut off specific responses) from ethology.

At the core of his approach is the primacy of the mother-infant dyad. According to Bowlby, we are born object-seeking; the child doesn't become attached to its caretaker merely because it associates her with the meeting of biological needs, but rather because attachment itself is a biological need. This intense behavioural and affective bond has an evolutionary function that enhances the child's chances of survival by ensuring proximity to its caretaker.

Bowlby (1969) cites five basic instinctive responses (activating and terminating stimuli) that contribute to this indelible mother-child bond: sucking, smiling, clinging, crying, and following. While the critical period for the organization of this system is the second half of the first year (Bretherton, 1985), it remains active throughout the lifespan—its behavioural and emotional manifestations varying in accordance to the individual's developmental level and situational stressors.

Bowlby felt that the fundamental developmental task of childhood is the establishment of a basic sense of trust and self-worth. Through its relationship with its caretaker the child develops enduring "internal working models" of its self and the social world which provide the basis through which all subsequent relationships are experienced. That is, in the context of this primal relationship, the child develops basic schemas about

the self and others: the securely attached child comes to view the self as valued, and worthy of others, and to view others as generally responsive and caring.

Bowlby's research group was joined by Mary Ainsworth in 1950. While Bowlby explicated the importance of the mother-infant relationship for subsequent development, it was Ainsworth who derived the classic methodology for systematically studying the nature of this crucial bond. Most of Bowlby's formulations came from naturalistic observation of children and interviews with parents in a hospital setting. Ainsworth adapted these naturalistic methods (Ainsworth et al., 1978) for use in the Strange Situation paradigm. First, the mother and infant are observed in an unfamiliar playroom, later, they are joined by an unfamiliar adult. Then the stranger is left alone to play with the baby. Then the mother returns. Then both the mother and the stranger leave. And at last both the mother and the stranger return again.

As attachment theory would predict, children tended to explore more bravely when the mother was present than when the stranger was present or when they were alone. The mother served as a "safe base" from which the infant could venture out into the world. Ainsworth also noticed differences in how infants reacted upon reunion with their mother. It was from this reunion scenario that Ainsworth developed her attachment classification system which placed infants into one of three categories: secure, anxious/avoidant and anxious/ambivalent. Securely attached infants use mother as a "secure base" from which to explore their surroundings. When compared to insecurely attached children, securely attached children exhibit less negative affect and tend to be more socially competent (Sroufe, 1983; Waters, Wippman, & Sroufe, 1979). Children with an avoidant attachment style tend to adopt a strategy of cutting off feelings of anger or other distressed affect (Kobak, 1986), and to express hostility inappropriately with peers or in their play (Main & Stadtman, 1981; Sroufe, 1983). Ambivalent children on the other hand, are more likely to show distress and to express fear and anger directly to their attachment figures (Kobak, 1986), and tend to be (as reported by teachers) more impulsive and helpless than other children (Sroufe, 1983).

Attachment Across the Lifespan

Research has shown that the quality of an infant's pattern of attachment to caregivers is related to numerous indices of adjustment in later childhood (e.g. George & Main, 1979; Main et al, 1985; Waters et al., 1979). Numerous studies attest to the persistence of attachment patterns across the lifespan (e.g. Elicker, Englund, and Sroufe, 1992; Kirkpatrick and Hazan, 1994; Rothbard and Shaver, 1994; and Sroufe, Carlson, and Shulman, 1993). For example, Kirkpatrick and Hazan (1994) did a longitudinal study of adult attachment styles over a four year period. They found that, of the 172

respondents, 70% reported the same attachment style at time 2 as they had at time 1, four years earlier. As well, secure adults were more likely than insecures to choose the same attachment style four years later. They also found that attachment stability was moderated to a certain degree by the breakup or onset of relationships.

Sroufe and Waters (1977) view attachment as an organizational construct, postulating a "continuity of adaptation hypothesis," which holds that "given a well-understood behavioural system such as underlies attachment, early adaptations can be shown to be qualitatively similar to later adaptations" (p. 1190). Such that, differences in the quality of early attachment experiences should be reflected in different behavioural dispositions later in life. This is not to say that attachment behaviours in adulthood mirror those in childhood, but rather that they "are conceptually parallel and empirically predictable" (Shaver, et al, 1996; p. 28).

Hazan and Shaver (1987) were the first to extend attachment theory to the study of adult relationships. They adapted Ainsworth et al.'s (1978) typology for use with adults; finding that the three attachment styles (secure, avoidant, and anxious/ambivalent) varied in terms of comfort with closeness, comfort with depending on others, and anxiety about relationships. Secure adults exhibited greater comfort with closeness and dependence on others, and less anxiety about relationships than the other two attachment types. Avoidant adults are uncomfortable with closeness and dependence, and anxious about relationships, and about people getting too close. Anxious/ambivalent people feel that others are reluctant to get as close as they would like, that their partners don't really love them or want to be with them, and that their desire for closeness drives other people away.

In a sample of 108 undergraduates, Hazan and Shaver (1987) found the distribution of self-reported types to be as follows: 56% secure, 24% avoidant, 20% preoccupied. Consistent with Ainsworth et al.'s (1978) classifications, Hazan and Shaver found that secure adults, in comparison with insecure adults, were more likely to report warm relationships with both parents. Avoidant adults, in comparison with anxious adults, were more likely to describe their mothers as cold and rejecting, while anxious adults were more likely to see their father as unfair.

While most of the attachment stability studies above assume, following Bowlby, that internal working models are the underlying "mechanisms of continuity" (Shaver & Clark, 1996), Bartholomew (Bartholomew, 1990; Bartholomew & Horowitz, 1991) goes one step further by actually incorporating internal working models into her typology. Bartholomew posits a four category model of adult attachment styles based on Bowlby's (1973) distinction between models of self and models of other. Combining the self-other pole with a positive-negative pole, she arrived at four types: Secure (positive model of self and other), Dismissing (positive model of self; negative model of other), Preoccupied (negative model of self; positive model of other), and Fearful (negative model of self;

negative model of other). The preoccupied style corresponds with Hazan and Shaver's anxious type. These insecure individuals (negative model of self) constantly seek closeness (positive model of others) and doubt others' desire to share it with them. The fearful and dismissing styles both fall into Hazan and Shaver's avoidant category, in that both groups have difficulty becoming close and trusting others in relationship (negative model of other). But those exhibiting a fearful style have a negative model of self, and so are socially insecure and lack assertiveness, whereas those using a dismissing style have a positive model of self and maintain this by downplaying the importance of others and relationships. Research (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1993) has shown that the four attachment prototypes can be reliably measured, the hypothesized two-dimensional structure does indeed underlie the four types, and that different methods of assessment such as interviewer ratings and self-classifications converge in theoretically consistent ways.

With the idea of internal working models, Bowlby asserted that we behave as we do, because of how we process social information. There is a vast social cognitive literature that explores just this; how we take in, process, and act upon information. Bartholomew's classification system not only gives a more discriminating account of avoidant adults, but, since it is predicated on underlying cognitive structures it also provides the potential for greater explanatory power than Hazan and Shaver's approach.

Internal Working Models

Recently, the study of internal working models has proceeded along ground well trodden by social cognitive theorists. The notion of internal working models as conceptualized in attachment theory is similar to "schemas" and "scripts" in social cognitive theory. Internal working models, like schemas and scripts and other social cognitive structures, help us fill in missing information in particular social situations. But as Shaver, Collins, and Clark (1996) point out there are several ways in which working models differ from other cognitive structures. First, working models are conceptualized as involving more than just the cognitive, incorporating affective and motivational elements as well. Secondly, working models are more "heavily affect-laden." Working models are part of the attachment system, and the attachment system functions primarily as an affect-regulating system, and thus emotions are deeply rooted in the structure of working models. A third distinction is that working models are more "explicitly interpersonal and relational in nature" than other social representations. A final difference is that working models are broader, more multidimensional, and more complex than other social cognitive structures. Working models may incorporate many elements of schemas, scripts, and attitudes, and these features may enter memory in any number of forms (e.g. episodic, procedural, and

semantic memories), and in fact, working models may include contradictory representations of the same experience.

Similar to other social cognitive structures, working models exist in a network arranged hierarchically according to level of abstraction or generality (Collins & Read, 1994; Shaver, Collins, & Clark, 1996). Multiple models allow the person to function across a wide array of situations and relationships. The hierarchy of models is arranged so that the most generic models, those abstracted from a composite of relationship experiences with important attachment figures, are at the top. These generic models can also be thought of as default models (Collins & Read, 1994), the ones that are initially applied across diverse situations. But while these models may be far-ranging, they provide insufficient specificity in any particular relationship or situation (the "jack-of-all-trades-master-of-none" limitation) and thus the details of particular situations are accounted for with more specific models (e.g. parent-child, romantic partners, to even more specific, my husband Mark, my oldest daughter Kate). Thus the more encompassing a model is the less detailed it tends to be.

Not only do models vary in abstractness but they can also vary in terms of: degree of elaboration, valence, coherency, and importance (centrality in the network and density of connections to other models). For example models of parent-child or spousal relationships should be deeply set within the network and be more complex and articulated than should models pertaining to lesser relationships (Shaver et al., 1996).

Given a plethora of internal working models, how is it that certain models are evoked in certain circumstances and others are not? The accessibility of models depends on: 1) Characteristics of the models themselves such as strength, and density. The strength and density of a model depends on experience, connections will be better for a model that has been activated frequently in the past. 2) The individual's present mood and motivation. Whether certain models are more or less likely to be evoked may also depend on emotional states and situational interpretations and goals. Related to this, different people (with different attachment style profiles) have different thresholds for particular attachment needs. 3) The fit between the situation and the features of the working model. Certain characteristics are more salient in certain relationships, for example gender and physical appearance should be salient cues in activating models pertaining to romantic relationships. 4) Specificity, or the exactness of the fit between the features of the situation and the features of the model. The greater the correspondence between a model and a situation the greater the likelihood of the model being activated. In general, abstract models will be used, by default, in novel situations and relationships, and as experience and familiarity with a situation or relationship increases, more specific models are constructed and activated. As Collins and Read (1994, p. 60) put it, "[a]ll other things being equal, more specific models will be preferred."

Generally, working models operate beyond conscious control, but in a goal-directed way. The attachment system is essentially an emotion-regulation system centred around the goal of stress reduction (i.e. felt-security) via various forms of proximity-seeking behaviour. People with differing attachment representations have differing attachment styles and thus different strategies, goals, and thresholds for achieving and maintaining a sense of felt-security.

With multiple working models there is always the chance of incompatible or competing models interfering with each other. The degree of interference or integration among multiple models can be thought of in terms of "coherence" (Main, 1991). Using the Adult Attachment Interview (Main et al., 1985)—which focuses on adult accounts of early relationships with attachment figures (usually parents) as predictors of the quality of that adult's relationship with their own children and those children's children—Main and her colleagues found that secure adults tend to show greater coherence of discourse in the organization of working models than do adults with dismissing or preoccupied attachment styles. Secure adults are better able to talk about attachment experiences without becoming embroiled in emotional turmoil. Adults exhibiting an insecure attachment style seem less able to talk coherently about attachment experiences and relationships. Dismissing adults tend to deny the significance of early attachment experiences and current relationships. Preoccupied adults are still enmeshed in early attachment trauma and tend to become easily angered or upset when discussing past and present attachments. For adults in the latter two insecure categories, incompatible interpretations of experience seem to have become defensively dissociated. While such "representational homeostasis" (Bretherton, 1985) may provide emotional relief, based as it is on the exclusion of certain aspects of reality, it can ultimately lead to inappropriate, even pathological behaviour (Bowlby, 1980).

Stability and Change

Internal working models work similarly to other social-cognitive structures like schemas and scripts, except that they are broader, more multi-dimensional, explicitly interpersonal and relational in nature, and involve complex emotional and motivational connections (Shaver et al., 1996). They essentially function in a top-down manner (Shaver et al., 1996) and, as such, are subject to self-perpetuating information processing biases, like, selective attention, selective recall, and interpreting social cues in model confirming ways. Working models may also act as 'self-fulfilling prophecies' in that people tend to select and create social environments that confirm their expectations, whether it be partner choice or recurring interaction patterns (Collins & Read, 1994).

Such self-preserving perceptions and behaviours are much of the reason why working models tend to remain fairly stable, and why change is not easy or wholesale. But

change does occur, one way is through the gradual accrual of experience—the more diverse the experience the more complex the working models. Change may also occur more suddenly as a result of critical 'disconfirming' experiences such as serious trauma or a period of significant transition (Ricks, 1985). Hazan, Hutt, & Markus (cited in Shaver & Clark, 1994) reported that 25% of adults they sampled felt they had changed attachment styles at some time in their lives, attributing the changes to significant relationship events such as the break-up or consolidation of a romantic relationship. Main (1991) has also suggested that individuals can initiate change by bringing their models and related thought patterns into consciousness.

The dynamic, recursive relationship between general and specific models, with each influencing the constitution of the other, suggests the structural aspects of change. The formation of new situation-specific models is shaped by the information processing biases of extant general models, which in turn can be updated and refined to a limited degree by emerging specific models. As Collins and Read (1994, p. 82) point out, "models in the attachment network are not likely to be replaced or destroyed, but [instead] one's network will become more elaborated and more complex, containing a number of more specific submodels." Thus, as generalized models become less able to assimilate exceptions, accommodation increasingly occurs and new 'subtypes,' that is, more specific models, emerge.

The flexibility to create and elaborate subtypes seems to best characterize the representational networks of secure adults. Crittenden (1990) points out that differences in meta-structures predict differences in attachment behaviour. The most simple structure is Procrustean in nature, distorting perceptions to fit a single narrowly conceived model, which she suggests (Crittenden, 1988) may be typical of neglectful and abusing mothers and their children. The second organizational pattern, which may typify preoccupied and fearfully avoidant adults, allows multiple incompatible models to co-exist and thus inhibits the development of a coherent sense of self. The third structure, common in secure adults, promotes a more complex, multi-levelled, inter-related organization, and is characterized by extensive situation-specific subtyping and a integrated general model.

Information processing capacity can be hindered by factors such as emotional arousal, time limitations, or lack of motivation. For example in times of stress, even secure adults—victims of superficial, automatic processing—may fall back on old (default) models. Repetition and practicing are the keys to dislodging antiquated models and installing new more adaptive models as defaults. Over time, with effort, these new models can come to operate as automatically as the old models previously did (Collins & Read, 1994).

Summary

Attachment theory holds that one's early experiences within the context of the mother-infant dyad fundamentally influence how we see ourselves and others later in life. People's styles of interacting with others can be broadly characterized as: secure, dismissing, preoccupied, or fearful (although a person may use elements of each style, or use different styles depending on the circumstances). The continuity of one's attachment style depends upon the operation of internal working models; social-cognitive structures that affect how we receive and process social information. Internal working models are arranged hierarchically in terms of generality and abstraction, with generic, highly abstract internal working models operating at the top, and more detailed specific models operating at the bottom. The most general models are those whose formation was initiated in infancy and which have subsequently influenced the formation of later more specific models. Thus, these representational networks are self-perpetuating, and attachment styles tend to remain fairly stable across the lifespan. But stable does not mean static; the composition of internal working models and the hierarchical organization of their networks is susceptible to a certain degree of change. Such change may occur over time with the gradual accrual of disconfirming experiences (e.g. maturation), or it may occur abruptly due to a traumatic event (e.g. death of a loved one) or significant life transition (e.g. moving away to college).

Internal Working Models, Attachment and Separation-Individuation

It has been argued (Eagle, 1984) that Mahler's concepts of symbiosis and separation-individuation—on which Josselson's understanding of adolescent separation-individuation is based—might be better understood, not in a Freudian drive context, but as attachment phenomena. The symbiosis period which is so critical to the psychological "hatching" of the child in Mahler's account, seems to be describing early attachment dynamics. For instance, in discussing Mahler's depiction of the infant separation-individuation process, Bergman and Ellman (1979) might be mistaken for attachment theorists: "Each infant elicits his or her own mother's caregiving, and the mother responds with coenesthetic empathy to the needs of a particular infant" (p. 240). This seems to describe the intense emotional bond between mother and infant that is so important to the initial organization of the attachment system. "...[T]he blissfulness of the symbiotic stage, which is still longed for in later life [i.e. "felt security"], provides us with a reservoir of self-other experiences, which in normal development are pleasurable and creative...from early on, there may be two strands to the infant's experience of self: self-alone and self-with-other...the symbiotic phase is the bedrock of libidinal attachment and intimacy on the

one hand, and the beginnings of self-alone experience on the other" (p. 240-241). In effect, they are talking here about the emergence of internal working models of self and other. And they seem to be characterizing secure attachment when they note that, "...[T]he solid and pleasurable period of symbiosis means that the child will be more prepared...to...meet the stranger or strangeness of the outside world with greater confidence and less anxiety" (p.245).

Eagle (1984) points out the large number of studies from outside the psychoanalytic tradition that lend support to Mahler's formulations. In particular, he notes similarities between Mahler's concepts of "safe anchorage" and "emotional refuelling," and the "safe base" work done by ethologists and attachment theorists. He cites numerous studies supporting the association between the establishment of a "safe base" and exploratory behaviour in both animals (e.g. Harlow and Harlow, 1965, 1972; Hagan and Abel, 1971; Kaufman, 1974; and Wilson and Rajecki, 1974) and humans (e.g. Ainsworth, Bell, & Stayton, 1971; Ainsworth, 1974; Cox and Campbell, 1968). "What is...implied in Mahler's...formulations is that the more secure the attachment between mother and child, the greater the likelihood of independent and exploratory behaviour" (p.27).

The importance of the internalized "safe base" can also be seen in the rapprochement phase of adolescence, where exploratory movements toward selfhood are best effected within the context of healthy parent-adolescent attachment (Josselson, 1980, 1988; Grotevant & Cooper, 1985; Quintana & Lapsley, 1990). Numerous studies have highlighted the association between the quality of parent-adolescent relations and various indices of social and psychological adjustment (e.g. Armsden, 1986; Armsden and Greenberg, 1987; Frankel & Dullaert, 1977; Hamid & Wylie, 1980; Offer & Offer, 1975).

Similarly, as Hazan and Clark (1996) point out, Bowlby (1988) suggested that psychotherapy works when the therapist provides a safe base that allows the client to explore and alter their internal working models. Following from this, they suggest that, "[p]resumably, adolescents and adults, as they gain increasing independence from parents and other childhood attachment figures, can [also] undertake such revisions with the help of friends, lovers, mentors, and counsellors other than professional therapists..."(p.51). They seem here to be implicating separation-individuation in the process of reconfiguring internal working models.

Another point of theoretical contact between internal working models and separation-individuation can be seen in Main's (1991) concept of coherence. Coherence of discourse implies a certain reflexive distance or remove regarding attachment-related issues, the capacity to look upon attachment experiences with a certain degree of 'objectivity,' whereas incoherent discourse is symptomatic of an inability to gain this distance, the incapacity to look upon attachment experiences from any other perspective other than enmeshed subjectivity, hence the issues remain immediate and present.

Coherence is possible only if previous attachment security issues have been satisfactorily resolved, and new integrated working models constructed. Correspondingly, successful individuation is characterized by the integration of autonomy and relatedness, and a mature ability to reflect on oneself within their family and other relationships. Coherence varies across attachment styles. Main's adult attachment styles are consistent with Hazan and Shaver's (1987) and Bartholomew's (Bartholomew & Horowitz, 1991) typologies. Secure adults are able to speak coherently about current relationships and previous attachment experiences without becoming lost in emotional detail. Whereas, having failed to gain appropriate distance from early attachment experiences, adults preoccupied with attachment exhibit high lability when discussing attachment-related issues. In contrast, dismissing adults provide little emotional detail when discussing attachment-related issues and tend to deny/downplay the importance of attachment relationships altogether.

Mature separation-individuation is contingent on the transcendence of infantile object ties, and the subsequent diminution of parental identifications as the ego assumes their sustaining functions for itself; inability to achieve this may manifest in infantile drive fixations and object dependencies, and in chronic lability/object hunger or detachment/denial (Blos, 1968). Similarly, coherence also requires a certain transcendence (integration) of old incompatible internal working models. Multiple incompatible models interfere with each other and detrimentally effect the lucidity of thinking in regard to attachment-related issues.

Coherence of attachment organization also seems relevant to some measures of separation-individuation. For example, Hoffman's (1984) Psychological Separation Inventory has two subscales that purport to measure dimensions of separation-individuation that also seem to indicate coherence with respect to parental attachment: emotional independence, freedom from excessive need for approval, closeness, and emotional support in relation to parents; and conflictual independence, freedom from excessive guilt, anxiety, resentment, responsibility, and anger in relation to parents. Hoffman (1984) found that both emotional independence and conflictual independence predicted personal and academic adjustment in college. Hoffman and Weiss (1987) found that problematic separation from parents (conflictual dependence) was associated with reported emotional problems in college students.

The relation between coherence of internal working models and successful separation-individuation is further suggested by Rice et al's (1990) finding that one of the main factors underlying common measures of separation-individuation was positive feelings associated with parental separation. These positive feelings were described by the authors as "hopeful, non anxious, and unresentful reactions to a variety of separation experiences" (p. 200), and were positively related to college adjustment. Such nonconflictual feelings might also be said to describe coherent, secure adults.

Questions Under Study

The object of this literature review has been to suggest areas of convergence and overlap between separation-individuation and attachment theory, with the hope that documenting such connections may lend toward increasing our understanding of the separation-individuation process. As argued earlier, although attachment styles are relatively stable across the lifespan, they are prone to some degree of change, especially during times of significant relationship transition (Hazan, Hutt, and Markus, 1991; Kirkpatrick and Hazan, 1994). Change in attachment style suggests a corresponding change in internal working model organization, and it is my contention that the revision of these internal working models is just what is at stake in the separation-individuation process, particularly during the rapprochement phase. That is, the separation-individuation process is the process of gaining psychological distance from parents, of revisiting the issues of individuality and of connectedness, of re-evaluating the sort of self one is, and the kind of relationships one desires, which is to say, it is a process of reconditioning one's internal working model of the self and of one's social world. This is the first question of the study then, to address this issue empirically: What is the relationship between adult attachment and separation-individuation?

The second question involves a test of a mediational model. Presumably, the relationship between separation-individuation and adult attachment styles should be mediated by family background variables, such as family cohesion and adaptability and the quality of parental"bonding." This mediational hypothesis will be tested by means of the regression strategy proposed by Baron and Kenny (1986).

A third question concerns the relationship between separation-individuation and the so-called "positive illusions" which are thought to serve an ego-bolstering function during this difficult structural reorganization. The present study presents an opportunity to expand the literature on this question by examining the relationship between personal fable ideation and various indices of college adjustment. As well, the generality of the mental health-promoting effects of positive illusions will be further examined by relating personal fable ideation to differential patterns of adult attachment.

In addition, we will examine the "continuity of adaptation" (Sroufe and Waters, 1977) question in a novel way. Previous research has typically addressed this question by examining the relationship between parental attachment and such variables as college adjustment, autonomy and identity (Lapsley, Rice & FitzGerald, 1990; Quintana & Lapsley, 1987). We will attempt to replicate the findings of this literature using a novel measure of parental attachment (Parental Bonding Instrument). But this will also be the first study to examine the relationship between adult attachment patterns and indices of

college adjustment.

Finally, we will attempt to provide the first psychometric evidence on the validity of a relatively new measure of separation-individuation. Christensen and Wilson (1985) have designed an inventory for assessing adult manifestations of pathology in the separation-individuation process. Presumably these manifestations will be associated in theoretically-relevant ways with our measures of adult attachment, family cohesion, parental bonding and, of course, with our measure of normative separation-individuation and college adjustment.

Chapter 3

Method

The purpose of the study was to examine the relationship between attachment and separation-individuation. This relationship was studied in terms of both normal separation and pathological separation. In addition I looked at whether this relationship was mediated by family variables such as cohesion and attachment to parents. I also examined whether feelings of invulnerability and omnipotence were positive illusions that promoted certain aspects of mental health.

Participants

One hundred and fifty-six young adults enrolled in first, second, and third year psychology courses at a small university in western Canada participated in this study. The mean age of respondents was 20.24 years. One hundred and two participants were female, fifty-one were male (three respondents reported no gender). Participants received nominal course credit for their participation.

Measures

Psychological Separation

Separation-individuation was assessed in two ways. First, normal, or healthy separation-individuation was assessed by means of the Psychological Separation Inventory (PSI) designed by Hoffman (1984, Hoffman & Weiss, 1987). Psychological separation is defined by four dimensions: functional independence (ability to manage and direct one's practical and personal affairs without parental intervention); attitudinal independence (image of oneself as being unique and having attitudes, opinions and beliefs at variance with parental attitudes); emotional independence (freedom from excessive need for approval, closeness and emotional support); and conflictual independence (freedom from excessive guilt, resentment, anxiety). These four dimensions are derived as subscales, which are reported independently for Mother and Father. The PSI consists of 138 items that are responded to in a 5-step Likert format. High scores represent "better" separation. The PSI is widely used and appears to have acceptable factor structure and psychometric properties (Lopez & Gover, 1993).

Secondly, Christenson & Wilson (1985) have designed a 39-item scale to assess adult manifestations of pathology in the separation-individuation process. In preliminary

research this scale demonstrated satisfactory internal reliability and discriminated normal controls from a sample of patients diagnosed with borderline personality. Items are rated on a Likert-like scale. Sample items include:

When people really care for someone, they often feel worse about themselves.
It is easy for me to see both good and bad qualities that I have at the same time.
I find that people either really like me or they hate me.
I need other people around me to not feel empty.
I find that I really vacillate between really liking myself and really disliking myself.

Adjustment to College

Adjustment to college were assessed with the Student Adaptation to College Questionnarie designed by Baker and Siryk (1984). The full scale consists of four domains, although only two will be utilized in the present study. Social Adjustment assesses how well the student deals with the interpersonal experiences of university life (meeting new people, joining groups). Baker and Siryk reported coefficient alphas of .88 and .88 this subscale. Each statement is scored on a 9-point Likert-type scale. Sample items include:

I am very involved with social activities at the University.
I haven't been mixing too well with the opposite sex, lately.
Being lonesome is a source of difficulty for me now.
I am satisfied with the extent to which I am participating in social activities.

Personal-emotional adjustment concerns whether a student experiences general psychological distress or the somatic consequences of distress. Baker and Siryk (1986) report coefficient alphas of .82 and .79 for this subscale. Sample items include:

I haven't been able to control my emotions very well lately.
I have been getting angry too easily lately.
Lately I have been feeling moody and blue a lot.
I have been feeling in good health lately.

Adult Attachment Style

Adult attachment was assessed with the Close Relationships Questionnaire (CRQ) designed by Bartholomew and Horowitz (1991). Four attachment classifications are described by brief statements, and participants are simply required to endorse one of the

statements as being most descriptive of themselves. The four classifications are derived from two dimensions, an image of the self, and an image of the other. These dimensions are then dichotomized as positive or negative. For example, one's self-image can be such that one feels worthy of love and support (positive), or not (negative). Similarly, one's image of the other can be dichotomized as positive (the other is seen as trustworthy and available) or negative (or not trustworthy and available). When these dimensions are combined, 4 attachment classifications result.

Subjects who have a positive sense of self-worthiness, plus an expectation that others are trustworthy and available (positive sense of "other") are classified as "secure." The secure statement is as follows:

It is easy for me to become emotionally close to others. I am comfortable depending on other and having others depend on me. I don't worry about being alone or having others not accept me.

Subjects who have a positive sense of self-worthiness, but a highly negative view of others, are classified as "dismissing." The dismissing statement is as follows:

I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

Subjects who have a sense of unlovability/unworthiness, but also a positive disposition towards others, are classified as "preoccupied." The preoccupied statement is as follows:

I want to be completely emotionally intimate with other, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

Finally, subjects who have a sense of self-unworthiness and a view that others are rejecting, untrustworty or unavailable are classified as "fearful." The fearful statement is as follows:

I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I sometimes worry that I will be hurt if I allow myself to become too close to others.

As Bartholomew and Horowitz (1991) point out, these two dimensions can also be classified in terms of dependency (high and low) and avoidance (high and low). Hence the secure classification is characterized by low dependence and low avoidance; the dismissing classification as low dependence and high avoidance; the preoccupied classification as high dependence and low avoidance; the fearful classification as high dependence and high avoidance. After endorsing one of the statements, subjects were also be asked to rate each of the 4 attachment statements as to the extent to which they are self-descriptive along a 7-point Likert-type scale ("not at all like me" to "very much like me").

Blain et al. (1992) reported the following distribution of attachment styles using the CRQ in a sample of married couples: 51% secure, 23% fearful, 14% preoccupied, and 12% dismissing. Using an attachment interview, Bartholomew and Horowitz (1991) reported a similar distribution in a sample of undergraduates: 47% secure, 21% fearful, 18% dismissing, and 14% preoccupied. Brennan, Shaver, and Tobey (1991) found that the CRQ correlated in a consistent fashion with Hazan and Shaver's (1987) three category measure of attachment.

Attachment to Parents

Parental attachment was assessed by means of the Parental Bonding Instrument (PBI, Parker, Tupling & Brown, 1979). The PBI is a 25 item Likert-format scale which taps the dimension of care and the dimension of overprotectiveness. For the purposes of this study, high parental care is indicative of more secure attachment to parents, while high parental overprotectiveness is indicative of insecure attachment to parents. The care and overprotectiveness dimensions can be derived as subscales. Alternatively, the two dimensions can be jointly used to identify types of parental bonding, as follows:

Optimal bonding: high care-low overprotectivess
Affectionate constraint: high care-high overprotectiveness
Affectionless control: low care-high overprotectiveness
Weak/absent bonding: low care-low overprotectiveness

Participants are asked to rate each statement along a 4-step continuum ("very much like my mother/father" to "very much unlike my mother/father") as they remember their mother/father during the first 16 years of their life. Mothers and fathers are rated separately. Sample items from the "care" dimension are as follows:

Spoke to me with a warm and friendly voice.
Was affectionate to me.

Let me decide things for myself.

Sample items from the "overprotectiveness" dimension are as follows:

Tried to make me dependent on her/him.
Tended to baby me.
Did not want me to grow up.

Parker et al., (1979) reported 3-week test-retest reliability coefficients of .76 and .63 for the Care and Overprotection scales. Split-half reliabilities of .88 for the Care scale and .74 for the Overprotective scale were also reported. Concurrent validity was assessed by comparing two raters interview scores with PBI scores; the Care correlation was .78 while the Overprotection scale was .48. Overall the PBI's factor structure has proven acceptable, and the PBI has shown validity across numerous community populations (Lopez & Gover, 1993).

Family Cohesion and Adaptability

Family cohesion and family adaptability will be assessed with FACES-III, a widely used (30 item) instrument designed by David Olson and his colleagues (Olson, Portner, & Lavee, 1985). Family cohesion assesses the degree to which family members are separated from or connected to their families. It assesses the emotional bonding that family members have towards one another. Family adaptability is concerned with the degree to which the family system is flexible and able to change. It assesses the degree to which the family system is able to alter its power structures and role relationships in response to developmental change or situational stress.

Examples of "cohesion" items are as follows:

Family members are supportive of each other during difficult times.
Family members know each other's close friends.
Our family does things together.

Examples of "adaptability" items are as follows:

Children have a say in their discipline.
In our family, it is easy for everyone to express his/her opinion.
When problems arise, we compromise.

These items are rated along a 5-step continuum ("almost never" to"almost always"). Norms have been established to identify 4 levels of cohesion (disengaged, separated, connected, enmeshed) and 4 levels of adaptability (rigid, structured, flexible, chaotic).

Personal Fable Ideation

The "positive illusions" or "personal fable" dimensions of invulnerability and omnipotence will be assessed with the relevant items from the New Personal Fable Scale (Lapsley et al., 1990). Participants rate 33 items along a 5-step continuum ("strongly disagree" to "strongly agree").
Omnipotence items include the following:

I believe I can do anything I set my mind to.
I think that I am more persuasive than my friends.
I think I'm a powerful person.
I think I can be anything I want to be.
No one can stop me if I really want to do something.

Invulnerability items include the following:

Nothing seems to really bother me.
I believe in taking risks.
The problems that some people get into could never happen to me.
There are times when I think I am indestructible.
I can get away with things that other people can't.

Background Information

Finally, subjects responded to a standard demographics questionnaire which solicits background information on such things as: age, gender, year in university, marital status, typical grades, parental education (SES), racial/ethnic background, hours per week in gainful employment, and family structure. Some of these variables will function as control variables in regression analyses. Family structure, in particular, has been linked to differential patterns of separation-individuation (Allen, Stoltenberg & Rosko, 1990; LaVoie & Faulkner, 1996).

Five general questions were asked in this study: 1) What is the relationship between adult attachment and separation-individuation? 2) Is this relationship mediated by family

variables such as family cohesion and attachment to parents? 3) Are feelings of invulnerability and omnipotence "positive illusions" that promote successful separation-individuation and mental health in general? 4) Is attachment to parents related to adult attachment style, adjustment to college, and separation-individuation? (This is a test of the "continuity of adaptation" hypothesis.) 5) Is Christensen and Wilson's (1985) inventory for assessing adult manifestations of pathology in the separation-individuation process valid?

Chapter 4

Results

Instrument Reliability

The first set of analyses estimated the internal consistency (coefficient alpha) of each measuring instrument. This data is reported in Table 1. As can be seen, the internal consistencies, for the most part, were completely acceptable. There were, however, a number of exceptions. The reliability of the Conflictual Independence subscale (from the psychological separation battery) and the Adapatiblity subscale (from FACES III) were completely inadequate, and were therefore dropped from further analyses. A few other subscales (e.g. paternal overprotectiveness from the parental bonding measure, and functional independence from mother on the psychological separation index) were marginally adequate, but were otherwise retained. Note that the magnitude of estimates of internal consistency will set an upper limit on observed correlations.

Insert Table 1 here

Test of Means

The next set of analyses examined patterns of means differences among the variables. The first concern was to establish the validity of the classifications of adult attachment. Recall that subjects endorse a particular classification (Styles A, B, C, or D), but then rate, on a continuous scale, the extent to which each scale is self-descriptive. Presumably, subjects who endorse Style A (secure) should report the highest ratings on secure attachment. Similarly, subjects who endorse styles B, C and D should report higher ratings on fearful, preoccupied and dismissive, attachment, respectively. A series of one-way ANOVA's found significant F's for each attachment style: Style A, $F(3,138) = 54.69$; $p = .000$; Style B, $F(3,140) = 46.22$, $p = .000$; Style C, $F(3,138) = 49.52$, $p = .000$; Style D, $F(3,138) = 21.91$, $p = .000$. Post hoc Scheffe tests supported the CRQ's validity, finding that indeed Style A's are more secure, Style B's more fearful, Style C's more preoccupied, and Style D's more dismissive. Hence the adult attachment classifications appear to have considerable internal validity. (In addition it was found that 46% of respondents were secure, 24% fearful, 14% preoccupied, 16% dismissing. This distribution is similar to those reported by Blain et al.,1992, and Bartholomew and Horowitz,1991.)

Next, a series of 4 (adult attachment style) x 2 (gender) ANOVA's were calculated on adjustment to college, pathological separation, family cohesion, and feelings of invulnerability and omnipotence. It should be noted that all comparisons are orthogonal since there were no significant interaction effects between gender and attachment style. First I'll discuss the main effects of attachment style. Personal/emotional adjustment to college differed significantly according to attachment style, $F(3,137) = 7.42$, $p = .000$, but social adjustment to college did not. Post hoc comparisons of significant independent variable effects were calculated using the Scheffe procedure. In terms of personal/emotional adjustment, secure and dismissing adults show better adjustment than either fearful or preoccupied styles. This finding would seem to reflect the predominantly negative internal working models of students with high scores on the fearful and preoccupied scales. Remember, adults with a fearful attachment style have negative models of both self and others, while preoccupieds have a negative model of others.

Attachment style also showed an effect on pathological separation, $F(3,136) = 10.46$, $p = .000$. Post hoc analyses reveal that secure adult attachment style shows the least pathology in separation-individuation as compared to fearful and preoccupied styles. In addition, fearful adults show more pathological symptoms than do dismissing adults, while there was no difference between dismissing and preoccupied styles, and no difference between dismissing and secure styles. So it appears that preoccupied and fearful attachment styles reflect pathology in the separation-individuation process while secure and dismissing styles don't (or lesser degrees of it.) While this would be expected for secures, it also suggests that perhaps dismissing attachment style is not necessarily unhealthy. As shown above, dismissing adults also experience better emotional adjustment to college than fearfuls and preoccupieds. It may not be as healthy as secure attachment but it is certainly less harmful than fearful or preoccupied attachment.

Next, we looked at whether positive illusions like feelings of omnipotence and invulnerability were effected by attachment style. An examination of means reveals that indeed they are, both feelings of invulnerability, $F(3,138) = 5.23$, $p = .002$, and feelings of omnipotence, $F(3,140) = 4.76$, $p = .003$, vary according to attachment style. Post hoc analyses reveal that secure, dismissing, and preoccupied adults show a greater sense of invulnerability and omnipotence than do adults with a fearful attachment style. The finding that fearfuls are the most disadvantaged in terms of positive illusions about themselves makes sense in light of the fact that they have negative working model of the self and other. Consistent with this fearfuls (and preoccupieds, who have a negative model of others) have greater problems adjusting emotionally to college, although interestingly they don't appear to experience undue difficulties with social adjustment.

The next group of analyses looked at the effect of gender on personal/emotional adjustment to college. Personal/emotional adjustment did differ significantly according to

gender, $F(1,137) = 3.87$, $p = .051$, but social adjustment to college did not. Post hoc analyses showed that males as a group experience better personal/emotional adjustment to college than females.

Next we looked at whether positive illusions like feelings of omnipotence and invulnerability are effected by gender. It appears they are, both feelings of invulnerability, $F(1,138) = 23.66$, $p = .000$, and feelings of omnipotence, $F(1,140) = 5.64$, $p = .019$, vary according to gender. Post hoc analyses reveal that males tend to experience these positive illusions to a greater degree than females. The fact that males are more likely to have these positive illusions and that they tend to adapt better emotionally to college is consistent with the idea that these positive illusions serve an adaptive function in development.

Neither attachment style nor gender significantly effected family cohesion, and gender made no significant difference with regards to likelihood of pathology in separation.

In the next set of analyses we attempted to determine mean differences among the attachment classifications (and gender) for the various indices of psychological separation from mother and from father. These questions were addressed with a set of multivariate analyses of variance. Two MANOVA's were calculated to test whether a linear combination of psychological separation from father (attitudinal independence from father, functional independence from father, and emotional independence from father) and mother (attitudinal independence from mother, functional independence from mother, and emotional independence from mother) significantly differ by adult attachment style and gender. This analysis showed that gender had a significant multivariate effect (Pillais = .071, $F = 3.14$, $p = .028$) on psychological separation from father, but univariate tests could not locate the source of this gender difference. Attachment style also showed a significant multivariate effect (Pillais = .130, $F = 1.90$, $p = .051$) on psychological separation from father. Post hoc univariate analyses located emotional independence from father, $F(3,126) = 3.55$, $p = .016$, as the source of the univariate effect.

In the MANOVA on psychological separation from mother variables, gender showed a significant multivariate effect (Pillais = .139, $F = 6.82$, $p = .000$). Post hoc univariate analyses revealed univariate effects for emotional independence from mother, $F(1,129) = 11.81$, $p = .001$, and attitudinal independence from mother, $F(1,129) = 13.99$, $p = .000$, with emotional independence accounting for more of the effect than attitudinal independence. Attachment style did not show any significant effects on psychological separation from mother.

Correlational Analyses

A series of zero order correlations were conducted between pathological separation, normal psychological separation, feelings of invulnerability and omnipotence, adjustment to college, attachment (bonding) to parents, adult attachment style, and family cohesion. In general the correlational matrix reveals that pathological separation is associated with adjustment to college, attachment to parents, family cohesion, feelings of omnipotence and invulnerability, and adult attachment style in theoretically-consistent ways. The correlational matrix for normal psychological separation is another story. Normal psychological separation and pathological separation are inverse dimensions of separation-individuation. Thus it would be expected that measures of pathological separation and 'normal' psychological separation would be negatively correlated—an increase in pathological separation meaning a decrease in healthy psychological separation and vice versa. But in the present study this was not the case, in fact pathological separation and normal separation were not significantly related at all (see Table 2.) Why is this?

Insert Table 2 here

The pathological separation measure and the other other measures generally correlate in expected directions, while the measure of normal psychological separation (the PSI) correlates with the other measures in inconsistent and contradictory ways. So it may be that the PSI is not actually measuring 'normal' psychological separation as it purports to. This contradictory pattern will be examined next.

Pathological separation is associated with poor emotional and poor social adjustment to college. Surprisingly, healthy psychological separation is also associated with poor social adjustment to college (and attitudinal independence from father is associated with poor emotional adjustment.)

Pathological separation is negatively associated with maternal care (i.e. the more securely attached to mother the less pathology). Contradicting this pattern is the finding that maternal care, or secure attachment to mother is associated with poorer psychological separation from mother, whereas having an overprotective mother (insecure attachment to mother) is strongly associated with greater attitudinal independence from mother and father. As well, pathological separation is positively correlated with fearful and preoccupied adult attachment, and paternal overprotectivenss (i.e. the poorer the quality of attachment to father the greater the pathology). In contradiction of this pattern is the finding that higher paternal overprotectiveness is also associated with an increase in certain aspects of normal psychological separation (greater attitudinal independence from father.) In addition, paternal care, or secure attachment to father, is unexpectedly associated with poor

psychological separation from father. Again the construct validity of the PSI is brought into question.

Family cohesion is associated both with less pathology and with poor normal psychological separation at the same time! Psychological separation from father is negatively associated with social adjustment to college, as are attitudinal and emotion independence from mother. As expected, pathological separation is inversely related to feelings of omnipotence and invulnerability, but unexpectedly, normal psychological separation is also inversely related to these positive illusions.

Pathological separation is inversely related to secure adult attachment style and directly related to fearful and preoccupied styles, that is fearful and preoccupied styles are indicative of pathology while secure adult attachment is not (dismissing style which was not significantly related to pathology at all). Normal psychological separation was for the most part unrelated to adult attachment style the exception being preoccupieds who tend to be less functionally and emotionally independent from father).

The fact (see Table 2) that feelings of omnipotence and invulnerability are negatively correlated with pathological separation is consistent with Lapsley's (1993) contention that these positive illusions are an adaptive part of normal separation-individuation. On the other hand, with the exception of counterindicating attitudinal independence from father, omnipotence and invulnerability were not significantly related to psychological separation, casting further doubt on the validity of the PSI.

While family cohesion seems to counterindicate both normal and pathological separation-individuation, it is positively related with parental care, or secure attachment to parents. Family cohesion was also positively correlated with secure adult attachment, although r did not quite achieve significance at $p = .05$ (see Table 3.) Higher parental overprotectiveness, or poor attachment to parents corresponds with poor social adjustment to college and less likelihood of feelings of positive illusions. In addition, the higher the paternal overprotectiveness, or the poorer the attachment to father, the less likely are feelings of invulnerability and the more likely are emotional adjustment difficulties in college. Parental overprotectiveness (insecure parental attachment) is positively associated with preoccupied adult attachment style. Fearful adult attachment style is related to higher paternal overprotectiveness (insecure attachment to father) and lower maternal care (less secure attachment to mother). Paternal care (secure attachment to father) is associated with secure adult attachment, and maternal care (secure attachment to mother) is positively correlated (although r didn't quite reach significance at $p = .05$) with dismissing attachment style. (The correlation coefficients for attachment to parents, or parental bonding, and adult attachment style are in Table 4).

Insert Table 3 & 4 here

As indicated above, omnipotence and invulnerability are associated with less pathological separation. How do they correlate with parental care? Feelings of omnipotence is positively correlated with paternal care (secure attachment to father) and negatively correlated with parental overprotectiveness (insecure attachment to parents.) Invulnerability was also positively correlated with paternal care (secure attachment to father) and negatively correlated with paternal overprotectiveness (poor attachment to father.) As well we can see in Table 2 that feelings of omnipotence and invulnerability are associated with less pathological separation, and with better social and emotional adjustment to college.

In Table 3 it can be seen that higher parental care is associated with successful social adjustment to college while parental overprotectiveness is associated with poorer social adjustment to college.

Secure adult attachment style is associated with better adjustment to college, while fearful and preoccupied styles are associated with poor emotional adjustment to college (see Table 3.) Table 4 shows that the more securely attached an adult is the more feelings of omnipotence and invulnerability arise, in contrast the more fearful or preoccupied an adult's attachments the less likely that they will have these positive illusions. Dismissing attachment style is also associated with more feelings of invulnerability (suggesting that dismissing style has positive aspects, due perhaps, to positive models of self).

The above correlations suggest that feelings of omnipotence and invulnerability are indeed positive illusions that serve an adaptive function in the separation-individuation process, and that secure attachment to parents, and a secure attachment style in adult relationships are also important in this development process.

Regression Analyses

The first set of regressions examine the effect of family cohesion on pathological separation, adjustment to college, normal psychological separation, and adult attachment style, while holding the grades, father's education, and gender constant (see Table 5.)

First, I looked at whether or not family cohesion predicts pathological separation. When cohesion is regressed on pathological separation, controlling for grades, father's education, and gender, the overall regression coefficient is not significant. However, the partial regression coefficient for family cohesion on pathological separation is significant ($t = -2.597$, $p = .0103$), which means that cohesion accounts for a significant amount of variance in pathological separation above and beyond the contribution of the control

variables.

Secondly, I looked at the effect of family cohesion on "normal" separation from parents (see Table 5.) Partial regression coefficients reveal that lack of family cohesion predicts greater attitudinal independence from father ($t = -5.446$, $p = .000$), greater attitudinal independence from mother ($t = -3.522$, $p = .0006$), greater emotional independence from father ($t = -4.316$, $p = .000$), greater emotional independence from mother ($t = -3.451$, $p = .0007$), and greater functional independence from father ($t = -4.567$, $p = .000$). Thus it appears that family cohesion works against separation-individuation as measured by the PSI.

Insert Table 5 here

Greater family cohesion also predicts both better social ($t = 15.118$, $p = .000$) and better emotional adjustment ($t = 2.273$, $p = .0244$) to college.

Next, I assessed at the relationship between parental bonding, or attachment to parents, and family cohesion (see Table 11 later) Parental overprotection predicts family cohesion, $F(5,150) = 2.762$, $p = .0204$, accounting for about 7.5% of the variance above and beyond marks, father's education, and gender. Test of partial regression coefficients show that, in particular, maternal overprotection counterindicates family cohesion. Family cohesion is also predicted by greater parental care, or secure attachment to parents, $F(5,150) = 9.75$, $p = 000$. Parental care increases the amount of variance in family cohesion accounted for by about 23.5%.

Next I examined whether attachment to parents predicts feelings of omnipotence and invulnerability (see Table 10 later) Secure attachment to father (high paternal care) predicts increased feelings of invulnerability and omnipotence, while insecure attachment to father (high paternal overprotectiveness) predicts decreased feelings of invulnerability and omnipotence. Secure attachment to mother (high maternal care) predicts increased feelings of omnipotence but not invulnerability.

The next set of regressions examine the effects of pathological separation, feelings of invulnerability and omnipotence, psychological separation from parents, adult attachment style and parental bonding (attachment to parents) on adjustment to college while again holding grades, father's education, and gender constant.

First, I determined whether or not pathological separation predicts adjustment to college (see Table 6.) Pathological separation is a strong predictor of emotional adjustment to college, $F(4,151) = 13.747$, $p = .000$. Tests of partial regression coefficients revealed that while pathological separation is the stronger predictor of poor emotional adjustment, being female ($t = -1.99$, $p = .048$) and having a more educated father ($t = 2.06$, $p = .041$) were also significant predictors. Being female predicts poor emotional adjustment to

college, while having an educated father promotes adjustment. As for whether or not pathological separation is a predictor of social adjustment, again we have an insignificant overall F but a significant partial regression coefficient ($t = -2.21$, $p = .028$) that suggests pathological separation does indeed account for unique variance in emotional adjustment.

Insert Table 6 here

Next, I assessed the relationship between personal fable ideation and adjustment to college (see Table 7.) Feelings of omnipotence is a significant predictor of both social, $F(4,151) = 5.201$, $p = .0006$, and emotional adjustment, $F(4,151) = 6.824$, $p = .000$. Feelings of omnipotence account for about 10.5% of the variance in social adjustment and 11% of the variance in emotional adjustment. Feelings of invulnerability is a significant predictor of emotional adjustment to college, $F(4,151) = 5.9813$, $p = .0002$, accounting for about 9% of the variance in emotional adjustment. While the overall regression coefficient is not significant, tests of partial regression coefficients reveal that feelings of invulnerability does contribute something to the prediction of social adjustment ($t = 2.168$, $p = .0318$). Other tests of partial regression coefficients reveal that father's education level is also a significant predictor of emotional adjustment when either invulnerability ($t = 2.305$, $p = .0226$) or omnipotence ($t = 2.670$, $p = .0084$) are part of the equation, the more educated father is the better adjustment is.

Insert Table 7 here

Next we examine the relationship between psychological separation from parents and adjustment to college (see Table 9.) Independence from father is a significant predictor of emotional adjustment to college $F(6,149) = 2.3869$, $p = .0313$. Tests of partial regression coefficients reveal that attitudinal independence from father predicts poor emotional adjustment ($t = -2.536$, $p = .0123$). This negative relationship adds to the growing doubts about independence being all good. Independence from father also predicts social adjustment to college, $F(6,149) = 4.3077$, $p = .0005$. Tests of partial regression coefficients show that greater attitudinal independence from father is the strongest predictor ($t = -2.708$, $p = .0076$) of poor social adjustment to college. Independence from mother is also a significant predictor of social adjustment, $F(6,149) = 2.1577$, $p = .0502$. As with father, the partial regression coefficient of attitudinal independence from mother is a significant ($t = -2.342$, $p = .0205$) predictor of poor social adjustment. Thus it appears that attitudinal independence from parents is not good, and in fact may be a risk factor hindering social and emotional adjustment to college.

Does adult attachment style predict adjustment to college? Secure attachment

predicts both emotional (t = 3.915, p =.0001) and social adjustment to college (although the overall F was not significant the partial correlation coefficient was, t = 2.450, p = .0154). Both fearful (t = -3.977, p =.0001) and preoccupied (t = -3.584, p = .0005) attachment styles strongly predict poor emotional adjustment to college, but have no significant effect on social adjustment (see Table 7).

The next question is whether or not adjustment to college can be predicted from parental bonding/attachment to parents (see Table 10 later). It appears that parental overprotectiveness, or less secure attachment to parents, predicts both social, F(5,150) = 3.4729, p = .0053, and emotional, F(5,150) = 2.7991, p = .0109, adjustment. More secure attachment to parents (higher parental care) predicts social adjustment, F(5, 143) = 8.820, p .000, but not emotional adjustment to college. Tests of partial regression coefficients reveal that insecure attachment to father (high paternal overprotectiveness) predicts poor social and emotional adjustment, secure attachment to father (high paternal care) predicts better social adjustment. Insecure attachment to mother (high maternal overprotectiveness) predicts poor social adjustment to college, while secure attachment to mother (high maternal care) predicts better social adjustment.

The next set of regressions examine the effect of paternal bonding/attachment to parents, normal psychological separation, and pathological separation on adult attachment styles, with grades, father's education, and gender held constant. Remember, high paternal care represents more secure attachment to parents while parental overprotectiveness represents less secure attachment to parents. While none of the overall regression coefficients were significant, tests of partial regression coefficients revealed some theoretically-consistent patterns (see Table 11 later). A caring father predicts secure adult attachment style (t = 2.108, p =.0367). That is, secure attachment to father increases the likelihood of having a secure attachment style in adulthood. As well, paternal overprotectiveness, or insecure attachment to father, weakly predicts fearful attachment style (t = 2.567, p = .01). Other significant partial regression coefficients suggest that maternal care (attachment to mother) counterindicates fearful attachment style and predicts dismissing attachment style (again making the case that while dismissing attachment style may not be healthiest for you, it isn't necessarily detrimental either).

The following regressions examine whether or not pathological separation predicts adult attachment style (see Table 6). Pathological separation strongly counterindicates secure adult attachment (t= 4.929, p = .000, R Square = .144) which suggests that healthy separation-individuation is necessary for secure adult attachment. This conclusion is further supported by the fact that pathological separation strongly predicts both fearful (t = 5.155, p =.000) and preoccupied (t = 5.490, p = .000) attachment styles. Interestingly, dismissing attachment style is not significantly effected by pathological separation. Again while a dismissing style may not be as healthy as secure attachment, it would certainly

seem less harmful than either preoccupied or fearful styles.

The next couple of regressions examine the effect of pathological separation on personal fable feelings of invulnerability and omnipotence (see Table 6). Pathological separation accounts for about 5% of the variance in invulnerability, $F(4,151) = 9.686$, $p = .000$, above and beyond the 15% accounted for by marks, father's education, and gender. Likewise it adds almost 10% to the amount of variance accounted for when predicting feelings of omnipotence $F(4,151) = 7.064$, $p = .000$. Less pathology predicts increased feelings of omnipotence ($t = -4.20$, $p = .000$), but you are also more likely to experience these feelings if you're male ($t = -2.90$, $p = .004$) and you're father is of lower educational status ($t = -2.90$, $p = .004$). Increased feelings of invulnerability are also predicted by lack of pathology ($t = -5.407$, $p = .000$) and being male ($t = -3.22$, $p = .000$). Separate regression tests confirmed that feelings of both invulnerability and omnipotence are more likely in males.

While marks, father's education, and gender account for about 15% of the variance in feelings of invulnerability, adding parental overprotectiveness, or insecure attachment to parents, to the equation accounts for a further 5% of the variance which is a significant addition ($F = 7.68$) to our predictive power. In particular high paternal overprotectiveness (insecure attachment to father) significantly predicts decreased feelings of invulnerability ($t = -2.935$, $p = .0039$). Parental overprotectiveness also accounts for an additional 7.5% of the variance in feelings of omnipotence, $F(5,150) = 4.664$, $p = .0005$ (see Table 10.)

Regressions were also done to test the effect of attachment to parents on pathological separation (see Table 11 later). Again, while the overall regression coefficients were insignificant, tests of partial regression coefficients showed that maternal care, or attachment to mother, counterindicates pathological separation, while paternal overprotection, or insecure attachment to father predicts pathological separation.

The following set of regressions examined whether or not psychological separation from parents predicts adult attachment style (see Table 12 later). Psychological separation from father is a significant predictor of preoccupied attachment style, $F(6,149) = 2.25$, $p = .0419$. A test of partial regression coefficients reveals that lack of emotional independence from father is the most significant predictor ($t = .-2.015$, $p = .0459$). While the overall regression coefficients between psychological separation and the other attachment styles were not significant, there is a significant partial regression coefficient between functional independence from father and fearful adult attachment style ($t = -2.038$, $p = .0433$). So it does appear that lack of functional independence from father predicts fearful attachment.

Normal psychological separation does not account for a significant amount of variance in pathological separation (see Table 8.) As discussed previously, these are inverse dimensions of the separation process and so should be inversely related, i.e. an increase in pathology should predict an increase in healthy separation. The fact that they are

not adds to the doubts about the construct validity of the 'normal' measure (the PSI).

Insert Table 8 here

Mediational Hypotheses

The next set of questions we addressed are mediational ones. The mediational hypothesis testing procedure (Baron & Kenny, 1986) involves three steps: Step one, does the independent variable predict the dependent variable? If yes than we go to step two, does the independent variable predict the (hypothesized) mediating variable? If so, then step 3 assesses whether the independent variable still significantly predicts the dependent variable when the hypothesized mediating variable is added to the regression equation? If yes, then the variable does not mediate the relationship between the independent and dependent variables because it doesn't significantly effect the independent variable's ability to predict the dependent variable. If no, then the variable is said to mediate the relationship between the independent variable and the dependent variables, because it effects (adds to) the independent variable's ability to predict the dependent variable.

The first mediational hypothesis tested was, does family cohesion mediate the relationship between pathological separation (IV) and secure attachment style (DV)? When we look at secure attachment style we see that it is predicted by pathological separation (step 1). Next, in step 2, we see if pathological separation predicts family cohesion (the hypothesized mediating variable). While the overall regression coefficient is not significant, partial regression coefficients reveal that pathological separation does predict family cohesion. Now we go to step 3, and we see that pathological separation still significantly counterindicates secure attachment ($t = -4.647$, $p = .000$) even when family cohesion is entered into the equation. therefore family cohesion does not mediate the predictive relationship between pathological separation and secure attachment style. Likewise we see that cohesion doesn't mediate the relationship between pathological separation and either fearful, preoccupied, or dismissing attachment styles.

The next mediational question asks whether or not the relationship between paternal care and secure attachment is mediated by family cohesion. Since only paternal care significantly predicts secure attachment we will use it to test the mediational hypothesis. Paternal care significantly predicts family cohesion so we move to step 3. Indeed when family cohesion is added to the equation paternal care is no longer a significant predictor of secure adult attachment, thus it appears that family cohesion does mediate the predictive relation between paternal care, or secure attachment to father, and secure adult attachment style. That is, secure attachment to your father doesn't translate into secure attachment in

adult relations unless your family is cohesive.

Does pathological separation mediate the predictive relationship between adult attachment and emotional adjustment to college? Well, it appears to mediate the relationship between emotional adjustment and the secure, fearful, and preoccupied attachment styles, but it doesn't hold for the dismissing style.

Finally, parental care does not mediate the relationship between secure adult attachment and adjustment to college.

Insert Table 9, 10, 11, 12, & 13 here

Chapter 5

Discussion

Five general questions were asked in this study: 1) What is the relationship between adult attachment and separation-individuation? 2) Is this relationship mediated by family variables such as family cohesion and attachment to parents? 3) Are feelings of invulnerability and omnipotence "positive illusions" that promote successful separation-individuation and mental health in general? 4) Is attachment to parents related to adult attachment style, adjustment to college, and separation-individuation? (This is a test of the "continuity of adaptation" hypothesis.) 5) Is Christensen and Wilson's (1985) inventory for assessing adult manifestations of pathology in the separation-individuation process valid?

Separation-individuation was assessed both in terms of normal and pathological indicators. What factors are associated with pathological separation? What variables are associated with normal separation? Are normal and pathological separation indices inversely related? That is, high normal psychological separation scores should mean low pathological separation scores and vice versa.

Validity of Pathological Separation Inventory

First, with regards to the question of the validity of Christenson and Wilson's (1985) measure of pathological separation, it appears to have satisfactory reliability (.85) and convergent validity. Simple bi-directional correlational analyses generally reveal a theoretically-consistent pattern of correlations: greater pathology is associated with poor social and emotional adjustment to college, lower maternal care (insecure attachment to mother), higher paternal overprotectiveness (insecure attachment to father), and fearful and preoccupied adult attachment styles. Less pathological separation is associated with secure adult attachment, high family cohesion, and increased feelings of invulnerability and omnipotence. So we see that in this study, pathological separation, as measured by Christenson and Wilson's (1985) inventory, is generally related to the expected variables in the expected ways.

Relationship Between "Normal" Separation and Pathological Separation

But how does it relate to normal psychological separation as measured by the PSI (Hoffman, 1984)? Does it have discriminant validity? If so, it would be expected that measures of healthy and pathological separation would be inversely related, but instead

they were not significantly associated with each other. An analysis of the correlational matrix suggests that the reason for this puzzling result may lie in the dubious construct validity of the PSI. That is, it may be that the PSI does not actually measure "normal" psychological separation as it purports to. While the pathological separation measure and the other measures generally correlate in expected directions, the PSI (measure of normal separation) correlates with the other measures in inconsistent and contradictory ways. For example, we would expect healthy psychological separation to be advantageous to adjustment to college. But as measured by the PSI, normal separation from parents is associated with poor social adjustment to college, and attitudinal independence from father is associated with poor emotional adjustment.

Previous studies (e.g. Lopez, 1988; Rice, 1993; Rice et al., 1995) have found the emotional, functional, and attitudinal subscales of the PSI are highly intercorrelated and that they are inconsistent predictors of college adjustment. The aspect of separation-individuation, as measured by the the PSI, that most strongly and consistently indicates adjustment to college is conflictual independence. Rice et al. (1990) found the emotional, functional, and attitudinal subscales to be tapping into one dimension, general independence from parents, while conflictual independence was part of another dimension indicating positive feelings about separation. The latter factor doesn't measure independence from parents per se, but rather it measures the affective response to the separation process. The well-adjusted person tends to have more positive feelings regarding the separation process regardless of how far along it they are. It appears that what is important is not how independent from their parents the adolescent actually is, but how satisfied they are about their separation experiences with their parents to date. They found that those who report less anger and resentment toward their parents tend to show better adjustment to college. Rice (1993) found this to be particularly true for sons in relation to their fathers. Unfortunately in the present study, data from the conflictual independence subscale was unreliable and so could not be used in the analyses.

The generally negative relationship between high PSI scores (high separation or independence from parents) and college adjustment found in the present study is consistent with Rice et al.'s (1995) suggestion that what the emotional, functional, and attitudinal independence subscales of the PSI actually measure is not independence, but disengagement. The theoretical framework behind the PSI draws attention to the negative aspects of closeness (such as the threat of "enmeshment") and conceptualizes successful separation as the transcendence of psychological dependence on parents (Hoffman, 1984; Lopez & Gover, 1993). Such a model may overemphasize the importance of autonomy at the expense of connectedness. This would make sense in light of our findings, in that it would be expected that disengagement would not predict secure attachment nor would it aid in the rapprochement so vital to successful separation-individuation. Josselson (1988)

and others have argued that separation-individuation is not just about moving away from dependence to separateness, rather separation involves achieving new mature forms of connectedness. Rice et al. (1993) found that dependence on parents was positively associated with secure attachment and better adjustment to college.

In the present study, family cohesion is associated with less independence from parents. This is as would be expected given the theory underlying the PSI, which tends to characterize cohesion negatively in terms of enmeshment. But family cohesion is associated with less pathology in separation, secure attachment to parents, secure adult attachment style, and better adjustment to college. Thus closeness with parents seems to hold numerous developmental advantages over independence—or more appropriately, disengagement—from parents. Further to this is the fact that secure attachment to father—which is associated with better social adjustment to college, secure adult attachment and less pathology—is negatively associated with attitudinal independence from father. Attitudinal independence from father is also associated with poorer adjustment to college and decreased feelings of omnipotence and invulnerability—which strongly predict less pathology and better adjustment to college. In addition, attitudinal independence from mother indicates poor social adjustment to college. It seems attitudinal independence from parents is not necessarily good, in fact, it may be a risk factor for poor social and emotional adjustment to college. (Attitudinal independence from dad also predicts greater pathological separation, $t = 1.838$, $p = .068$.) So it appears that PSI is indeed measuring disengagement rather than separation-individuation.

It was expected, and the data confirmed thus, that greater pathological separation is associated with insecure attachment to mother (lower maternal care). The corollary to this is that healthy separation would be expected to be associated with secure attachment to mother but in fact, the reverse is true. More secure attachment to mother (higher maternal care) was actually correlated with poorer psychological separation as measured by the PSI. As well, in further contradiction, more insecure attachment to mother (maternal overprotection) was actually associated with an increase in attitudinal independence from parents, and more secure attachment to father (higher paternal care) is associated with less independence from parents. Independence from parents (as is pathological separation) is associated with poor social adjustment to college, and with decreased feelings of omnipotence and invulnerability.

We will now review the various other questions addressed by this study.

Adult Attachment and Separation-Individuation

What is the relationship between adult attachment and separation-individuation? Zero order correlations reveal that fearful and preoccupied attachment styles are associated with greater

pathology while secure style is not. Dismissing style evidenced no significant relationship with pathological separation. Regression analyses revealed that pathological separation strongly predicts both fearful and preoccupied attachment styles. Secure attachment, on the other hand, predicts less pathology. With respect to normal psychological separation (independence from parents), preoccupied attachment style is associated with less functional and emotional independence from father. Regression analyses show that independence from father (in particular, lack of emotional separation from father) is a significant predictor of preoccupied attachment style, and that lack of functional independence from father predicts fearful attachment style. These findings would make sense in that both preoccupieds and fearfuls have negative models of self, and so might be expected to demonstrate lesser degrees of independence. These results taken together suggest that successful separation-individuation is more likely for securely attached adults, while pathological separation is more likely for preoccupied and fearful adults. Interestingly, dismissing attachment style is not significantly effected by either pathological or normal separation.

Mediational Hypotheses

The next question involves tests of mediational hypotheses. Does family cohesion mediate the relationship between separation-individuation and adult attachment style? Since psychological separation (independence from parents) showed no effect on adult attachment, the mediational hypothesis did not bear testing. A test of the next mediational hypothesis reveals that family cohesion does not mediate the relationship between pathological separation and adult attachment style. Family cohesion does mediate the relationship between paternal care (secure attachment to father) and secure attachment style. Thus it appears that secure attachment to father doesn't translate into secure attachment in adult relations unless your family is cohesive.

Positive Illusions

I also looked at whether personal fable feelings of invulnerability and omnipotence are in fact health-promoting positive illusions. Feelings of omnipotence and invulnerability are strong predictors of secure attachment style. Adults with a fearful attachment style are the least likely group to experience positive illusions about themselves. Increased feelings of omnipotence and invulnerability also predict secure attachment to parents and better social and emotional adjustment to college. It appears that males report less problems adjusting to college, and that this is due in part because of their greater tendency to experience these positive illusions. Feelings of invulnerability and omnipotence also

predict less pathological separation. Thus the data seems to support Lapsley's (1993) contention that feelings of omnipotence and invulnerability are indeed positive illusions that promote certain aspects of healthy psychological development.

It is interesting to note that individuals with a dismissing style are more likely to experience these positive illusions than either preoccupieds or fearfuls. This study also presented other interesting findings regarding the dismissing attachment style. Dismissing adults experience less pathology in separation, better emotional adjustment to college, and greater likelihood of health-promoting positive illusions than either preoccupied or fearful styles. Also, surprisingly, it is associated with more secure attachment to mother (higher maternal care) and less insecure attachment to father (paternal overprotectiveness.) These findings taken together suggest that while dismissing attachment style may not be as adaptive as a secure attachment style, it certainly seems to hold certain advantages over either preoccupied or fearful styles. That is, holding a positive model of self is less harmful than having a negative model of self such as preoccupieds and fearfuls do.

Continuity of Adaptation

Next, we attempted to provide further support for the "continuity of adaptation" hypothesis. What is the relationship between parental attachment and separation-individuation? The more secure attachment to mother the less manifestations of separation pathology in adulthood, obversely, the less secure attachment to father the greater the pathology. Insecure attachment to parents effects feelings of omnipotence and invulnerability, in particular, insecure attachment to father predicts decreased feelings of invulnerability (which is associated with more pathological separation).

Insecure attachment to parents is positively associated with preoccupied and fearful adult attachment styles. Secure adult attachment style is most likely when attachment to father is secure (high paternal care), and dismissing style is most likely (although r didn't quite reach significance at $p = .05$) when attachment to mother is more secure (high maternal care). Dismissing style is also associated with less insecure attachment to father (less paternal overprotectiveness). These findings point to the continuity of attachment patterns between adulthood and infancy. At the level of mental representation, insecure attachment to parents precipitates negative working models which increases one's chances of having a preoccupied or fearful adult attachment styles. Whereas, secure attachment to parents in infancy precipitates positive working models and secure adult attachment style. Of course, contemporary appraisals of attachment to parents may simply reflect one's present adult attachment style. What is required is longitudinal data on attachment status across numerous periods in the individual's life, needless to say, the logistics of such a study make it unlikely any time soon.

Rice et al. (1995) conducted a 2 year longitudinal study of students in their junior and then freshmen years of college. They found that while secure attachment was very stable (less than 10% of individuals reporting secure attachment to parents at time 1 reported a different attachment status at time 2), one in three individuals reporting insecure attachment to parents at time 1 reported secure attachment at time 2. They suggest that adolescent movement from insecure to secure attachment to parents may be developmental in nature. The young adult after living away from home for a prolonged period of time may gain a distance and maturity that changes their perspective on their relationship with their parents. What this implies at the level of representation, is that new experiences can indeed alter pre-existing working models, and that the transition to college might be a time when working models are particularly prone to change.

The present study also found that more insecure attachment to parents (high parental overprotectiveness) predicts adjustment to college. More insecure attachment to father (paternal overprotectiveness) predicts poor social and emotional adjustment, while more insecure attachment to mother (maternal overprotectiveness) predicts poor social adjustment. These findings are consistent with other studies that have found secure attachment to be positively associated with various indices of college adjustment (e.g. Kenny & Donaldson, 1991; Lapsley et al. 1990).

Rice (1993) found no relation between attachment and adjustment to college among freshmen, but did find a significant pattern of associations between attachment and college adjustment for juniors, with secure attachment related to better college adjustment. Rice suggested that attachment style became more pronounced for second year students because they were preparing for the major life transition of entering the workforce. Attachment style is salient because internal working models are at issue. So why is secure attachment style less likely to change (Rice, 1995)? It could be that securely attached individual's are more likely to cope satisfactorily with such a transition because they possess the necessary "instrumental competence." Rice (1993) found attachment style to be more pronounced for juniors because they were facing a stressful life transition. If we move to the "level of representation" we see that during periods of stress information processing tends to be abbreviated and superficial, and central default models, positive or negative, tend to preempt less engrained (tentative) peripheral models. Therefore older internal working models core to the person's attachment style are highly active and at issue (open to confirmation or disconfirmation) in these stressful periods. In a coherent working model organization there is greater congruency between peripheral and core models. Coherent internal working model organization underlies instrumental competence and secure attachment. The coherent working model organization of secures is likely to maintain itself because it fits reality best, and is adaptive, while the less adaptive incoherent working model structure of fearfuls or preoccupieds may be altered for the good (more coherent) by

such significant instances of successful adaptation (i.e. such a life transition provides opportunities for positive experiences which disconfirm negative models.) Thus individuals who successfully adapt to the transition are also more likely to remain securely attached having now acquired cognitive, emotional, and motivational elements characteristic of a coherent internal model structure. It should be noted that since, most individual's in Rice et al.'s (1995) study retained the same attachment status, internal working models are for the most part fairly stable. Remember, cognitive structures tend to be self-confirming—beliefs tend to beget behaviours that illicit responses from others that reinforce those same beliefs.

Analyses of variance showed significant effects for adult attachment style on emotional adjustment to college. Both secures and dismissings showed better adjustment than either fearfuls or preoccupieds. Regression analyses revealed that secure attachment predicts better social and emotional adjustment to college, while preoccupied and fearful styles predict poor emotional adjustment to college, this would seem to reflect the predominantly negative working models held by fearfuls and preoccupieds. A mediational hypothesis was also tested, and it appears that the relationship between secure, fearful, and preoccupied adult attachment styles and emotional adjustment to college is mediated by pathological separation. That is, if pathological or borderline symptoms are present they will alter the relationship between adult attachment and emotional adjustment to college. But interestingly, this mediational hypothesis does not hold for dismissing attachment style.

Pathological separation predicts secure, fearful, and preoccupied adult attachment styles; secure attachment means less pathology while fearful and preoccupied styles indicate greater pathology. Secure adult attachment style seems to be characteristic or indicative of resolution of the rapprochement crisis, the crux of the separation-individuation process. Consistent with Sroufe and Water's (1977) "organizational perspective," the securely attached adult has the requisite "instrumental competence" to reconcile desire for autonomy and individuality with needs for closeness and affiliation. As discussed previously, the secure adult has a coherent internal working model organization. Such a coherent system would seem better suited to reconciling such dialectically related needs than would the incoherent internal working model organizations of insecurely attached adults. Secure adults have achieved a coherent, or mature integration of positive internal working models of self (separateness) and other (relatedness). They are able to participate fully in relationship without detriment to their sense of self, and vice versa are able to fully experience the self without detriment to relationship. They value relationships and are not afraid of intimacy, but at the same time are capable of independent action, of being on their own.

Summary

The PSI (Hoffman, 1984) was used as a measure of "normal" separation from parents, but the data suggests that what it is actually measuring is disengagement from parents. Although not related to pathological separation itself, PSI scores are directly correlated with several variables like poor social adjustment to college, insecure attachment to parents, decreased positive illusions, and lower family cohesion—all of which are themselves associated with greater pathology. This appears consistent with previous findings (e.g. Rice et al., 1990; Rice et al, 1995) that suggest independence from parents is not always good, in fact, the actual level of independence from parents is not as important as the person's degree of satisfaction with their level of independence. One might speculate that the person with positive feelings about separation feels neither unduly pushed nor pulled by their parents, separation-individuation is unfolding at a comfortable, idiosyncratic pace. Consistent with this, family cohesion was negatively related to independence from parents but positively related to several variables favouring good adjustment, and negatively related to pathology. Thus it appears successful separation-individuation occurs in the context of nurturing relationship. "Attachment is not the opposite of separation-individuation—it is coincident with it" (Josselson, 1988).

Corroborating evidence for the the above conclusions would be provided by data showing that conflictual independence from parents was negatively related to pathology and positively related to adjustment and variables favouring adjustment. But unfortunately the reliability of the conflictual independence data in this study was unacceptably low. Future studies would do well to study this relationship further using another measure of separation—perhaps the SITA (Levine et al., 1986) combined with the PSI's conflictual independence score might provide a better index.

It was also found that personal fable feelings of omnipotence and invulnerability, which are more likely in males, are indeed "positive illusions" that serve an adaptive function in the separation-individuation process. Secure attachment to parents, and a secure attachment style in adult relationships are also important in this development process. Secure adult attachment style, in particular, is associated with less pathological separation, better emotional and social adjustment to college, health-promoting positive illusions, and higher family cohesion. It seems that those with a secure attachment style are best equipped to meet the demands of successful separation-individuation.

Future researchers would do well to attempt to gather longitudinal data

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Appendix A

Tables

Table 1
Instrument Reliabilities

Instrument Coefficient	Subscale	Reliability
New Personal Fable Scale		
	Omnipotence	.74
	Invulnerability	.71
Parental Bonding		
	Paternal Care	.81
	Maternal Care	.74
	Paternal Overprotectiveness	.55
	Maternal Overprotectiveness	.64
College Adjustment		
	Social Adjustment	.83
	Personal/Emotional Adjustment	.81
FACES III		
	Cohesion	.84
	Adaptability	.41
Psychological Separation From Father		
	Functional Independence	.74
	Attitudinal Independence	.78
	Emotional Independence	.79
	Conflictual Independence	.02
Psychological Separation From Mother		
	Functional Independence	.55
	Attitudinal Independence	.71
	Emotional Independence	.64
	Conflictual Independence	.20
Pathological Separation-Individuation		.85

Note: 2 items dropped from FACES-Cohesion; 1 item was dropped from Paternal Care; 1 item dropped from Omnipotence; 2 items dropped from Invulnerability; 3 items dropped from Personal/Emotional Adjustment; 1 item dropped from Attitudinal Independence-Father and Functional Independence-Father.

Table 2
Pathological Separation, Normal Separation (Independence From Parents), and Feelings of Invulnerability and Omnipotence Correlated With Attachment to Parents (Parental Bonding), Adjustment to College, and Family Cohesion; and Pathological Separation Correlated With Normal Separation (Independence From Parents) and Feelings of Invulnerability and Omnipotence.

	Pathological Separation	Independence From Father			Independence From Mother			Invuln-erability	Omni-potence
		Functional	Emotional	Attitudinal	Functional	Emotional	Attitudinal		
Pathological Separation	—	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-.2179	-.3048
Paternal Care	n.s.	-.4497	-.4110	-.4227	n.s.	n.s.	n.s.	.2387	n.s.
Paternal Over-protectiveness	.2107	n.s.	n.s.	.1993	n.s.	n.s.	n.s.	-.2670	-.2529
Maternal Care	-.1914	n.s.	n.s.	n.s.	n.s.	-.4629	-.2953	n.s.	n.s.
Maternal Over-	n.s.	n.s.	n.s.	.2135	n.s.	n.s.	.2455	n.s.	-.2302
Invulnerability	-.2179	n.s.	n.s.	-.2425	n.s.	n.s.	n.s.	—	—
Omnipotence	-.3048	n.s.	n.s.	-.2301	n.s.	n.s.	n.s.	—	—
Emotional Adjustment to College	-.4878	n.s.	n.s.	-.1901	n.s.	n.s.	n.s.	.3297	.3224
Social Adjustment to College	-.1771	-.2736	-.2793	-.3202	n.s.	-.1802	-.1994	.1553*	.3063
Family Cohesion	-.2088	-.3468	-.3306	-.4005	n.s.	-.2879	-.2743	n.s.	.2950

Correlations significant at p = .05 *significant at p = .057

Table 3
Adult Attachment Style Correlated With Attachment to Parents (Parental Bonding), Adjustment to College, and Family Cohesion; and Attachment to Parents (Parental bonding) Correlated With Adjustment to College.

	Paternal Care	Paternal Over-protectiveness	Maternal Care	Maternal Over-protectiveness	Emotional Adjustment to College	Social Adjustment to College	Family Cohesion
Secure	.1824	n.s.	n.s.	n.s.	.2814	.1956	.1429***
Fearful	n.s.	.2448	-.1542	n.s.	-.3093	n.s.	n.s.
Preoccupied	n.s.	.1836	n.s.	.1568**	-.2682	n.s.	n.s.
Dismissing	n.s.	-.1688	.1525*	n.s.	n.s.	n.s.	n.s.
Family Cohesion	.4001	-.2009	.3395	-.2589	.1679	.7756	—
Paternal Care					n.s.	.4049	
Paternal Over-protectiveness					-.2301	-.2491	
Maternal Care					n.s.	.3141	
Maternal Over-protectiveness					n.s.	-.2521	

Correlations significant at p = .05 *significant at P = .06 **significant at p = .057 ***significant at p = .08

Table 4
Adult Attachment Style Correlated With Pathological Separation, Normal Separation (Independence From Parents), and Feelings of Omnipotence and Invulnerability.

	Pathological Separation	Independence From Father			Independence From Mother			Invuln-erability	Omni-potence
		Functional	Emotional	Attitudinal	Functional	Emotional	Attitudinal		
Secure	-.3713	n.s.	n.s	n.s.	n.s.	n.s.	n.s.	.2708	.3855
Fearful	.3910	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-.2180	-.3602
Preoccupied	.4189	-.1644	-.2395	n.s.	n.s.	n.s.	n.s.	-.1630	-.1648
Dismissing	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	.1764	n.s.

Correlations are significant at p = .05

Table 5
Partial Regression Coefficients for Variables Predicted by Family Cohesion

Variable	B	SE B	Beta	t
Pathological Separation	-.8246	.3175	-.2075	-2.597*
Social Adjustment to College	.9317	.0616	.7748	15.118*
Emotional Adjustment to College	.3209	.1411	.1788	2.273*
Secure	.0253	.0148	.1381	1.709**
Fearful	-.0213	.0167	-.1038	-1.276
Preoccupied	-.0093	.0157	-.0479	-.593
Dismissing	.0228	.0146	.1260	1.559
Attitudinal Independence from Father	-.4592	.0843	-.4048	-5.446*
Attitudinal Independence from Mother	-.3054	.0867	-.2556	-3.522*
Emotional Independence from Father	-.4235	.0981	-.3322	-4.316*
Emotional Independence from Mother	-.4591	.1330	-.2588	-3.451*
Functional Independence from Father	-.3674	.0805	-.3479	-4.567*
Functional Independence from Mother	-.0521	.4173	-.0101	-.125

* significant at p = .05 ** significant at p = .089

Table 6
Partial Regression Coefficients for Variables Predicted by Pathological Separation

Variable	B	SE B	Beta	t
Social Adjustment to College	-.0534	.0241	-.1765	-2.215*
Emotional Adjustment to College	-.2133	.0315	-.4723	-6.763*
Invulnerability	-.0380	.0118	-.2342	-3.220*
Omnipotence	-.0671	.0160	-.3147	-4.204*
Secure	-.0171	.0035	-.3720	-4.929*
Fearful	.0200	.0039	.3873	5.155*
Preoccupied	.0198	.0036	.4043	5.490*
Dismissing	-.0011	.0037	-.0236	-.291
Family Cohesion	-.0518	.0200	-.2060	-2.597*

* significant at p = .05

Table 7
Partial Regression Coefficients for Variables Predicting Adjustment to College

Adjustment Variable	Predictor Variable	B	SE B	Beta	t
Social	Omnipotence	.4784	.1116	.3374	4.288*
Emotional		.7180	.1635	.3391	4.392*
Social	Invulnerability	.3488	.1609	.1870	2.168*
Emotional		.9148	.2282	.3287	4.009*
Social	Secure	1.280	.5221	.1947	2.450*
Emotional		2.918	.7452	.2976	3.915*
Social	Fearful	-.7761	.4704	-.1322	-1.650
Emotional		-2.639	.6634	-.3012	-3.977*
Social	Preoccupied	-.2173	.5052	-.0351	-.430
Emotional		-2.555	.7129	-.2766	-3.584*
Social	Dismissing	.6026	.5372	.0907	1.122
Emotional		1.069	.7877	.1078	1.357

* significant at p = .05

Table 8
Pathological Separation Predicted by Normal Psychological Separation

Adjustment Variable	Predictor Variable	B	SE B	Beta	t
Pathological Separation	AI Father	.5939	.3232	.1695	1.838**
	EI Father	.0460	.3272	.0147	.140
	FI Father	-.6794	.4111	-.1805	-1.653
	AI Mother	.1857	.3062	.0558	.606
	EI Mother	-.2929	.1993	-.1307	-1.469
	FI Mother	.0123	.0634	.0160	.194

** significant at p = .068

Table 9
Partial Regression Coefficients for Normal Separation Predicting Adjustment to College

Adjustment Variable	Predictor Variable	B	SE B	Beta	t
Social	AI Father	-.2489	.0920	-.2350	-2.708*
	EI Father	-.1217	.0931	-.1290	-1.307
	FI Father	-.0975	.1169	-.0856	-.834
Emotional	AI Father	-.3600	.1419	-.2275	-2.536*
	EI Father	-.0362	.1437	-.0257	-.251
	FI Father	.2597	.1806	.1528	1.438
Emotional	AI Mother	-.0925	.1361	-.0616	-.679
	EI Mother	.0492	.0886	.0486	.555
	FI Mother	.0101	.0282	.0290	.358
Social	AI Mother	-.2101	.0897	-.2088	-2.342*
	EI Mother	-.0881	.0584	-.1300	-1.509
	FI Mother	.0063	.0186	.0270	.339

* significant at p = .05

Table 10
Partial Regression Coefficients for Variables Predicted by Attachment to Parents (Parental Bonding)

Adjustment Variable	Predictor Variable	B	SE B	Beta	t
Emotional Adjustment	Paternal Overprotectiveness	-.4705	.2005	-.2073	-2.346*
	Maternal Overprotectiveness	.0211	.2136	.0087	.099
	Paternal Care	.192	.155	.105	1.238
	Maternal Care	.210	.215	.080	.933
Social Adjustment	Paternal Overprotectiveness	-.2715	.1330	-.1785	-2.041*
	Maternal Overprotectiveness	-.2877	.1417	-.1770	-2.031*
	Paternal Care	.451	.092	.373	4.907*
	Maternal Care	.425	.128	.254	3.324*
Invulnerability	Paternal Overprotectiveness	-.1973	.0672	-.2419	-2.935*
	Maternal Overprotectiveness	.0123	.0176	.0141	.172
	Paternal Care	.167	.063	.212	2.656*
	Maternal Care	E	E	E	E
Omnipotence	Paternal Overprotectiveness	-.1835	.0921	-.1712	-1.992*
	Maternal Overprotectiveness	-.1777	.0981	-.1551	-1.811
	Paternal Care	.198	.073	.216	2.719*
	Maternal Care	.305	.100	.243	3.035*

* significant at p = .05

Table 11
Partial Regression Coefficients for Variables Predicted by Attachment to Parents (Parental Bondng)

Adjustment Variable	Predictor Variable	B	SE B	Beta	t
Secure	Paternal Overprotectiveness	-.0153	.0212	-.0660	-.721
	Maternal Overprotectiveness	-.0173	.0226	-.0699	-.767
	Paternal Care	.0319	.0151	.1716	2.108*
	Maternal Care	.0231	.0202	.0942	1.142
Fearful	Paternal Overprotectiveness	.0596	.0232	.2301	.2.567*
	Maternal Overprotectiveness	.0058	.0247	.0208	.232
	Paternal Care	-.0043	.0171	-.0205	-.249
	Maternal Care	-.0450	.0229	-.1641	-1.970*
Preoccupied	Paternal Overprotectiveness	.0359	.0220	.1459	1.628
	Maternal Overprotectiveness	.0206	.0235	.0784	.878
	Paternal Care	-.0149	.0161	-.0755	-.925
	Maternal Care	-.0287	.0216	-.1103	-1.332
Dismissing	Paternal Overprotectiveness	-.0366	.0208	-.1601	-1.76
	Maternal Overprotectiveness	-5.357	.0221	-.0021	-.024
	Paternal Care	-.0010	.0150	-.0057	-.069
	Maternal Care	.0414	.0201	.1709	2.060*
Pathological Separation	Paternal Overprotectiveness	1.034	.4533	.2058	2.282*
	Maternal Overprotectiveness	.0346	.4828	.0064	.072
	Paternal Care	-.2431	.3281	-.0603	-.741
	Maternal Care	-1.045	.4392	-.1963	-2.379*
Family Cohesion	Paternal Overprotectiveness	-.1636	.1120	-.1293	-1.463
	Maternal Overprotectiveness	-.2563	.1191	-.1896	-2.152*
	Paternal Care	.3709	.0735	.3656	5.045*
	Maternal Care	.3760	.0984	.2807	3.822*

* significant at p = .05

Table 12
Partial Regression Coefficients for Adult Attachment Style Predicted by Normal Psychological Separation

Adjustment Variable	Predictor Variable	B	SE B	Beta	t
Secure	AI Father	-.0083	.0151	-.0517	-.553
	EI Father	.0064	.0152	.0452	.425
	FI Father	-.0069	.0191	-.0398	-.360
	AI Mother	-.0053	.0142	-.0345	-.373
	EI Mother	2.838	.0092	2.750	.003
	FI Mother	-.0023	.0029	-.0661	-.800
Fearful	AI Father	.0272	.0166	.1506	1.635
	EI Father	.0062	.0169	.0384	.367
	FI Father	-.0431	.0212	-.2223	-2.038*
	AI Mother	.0230	.0157	.1340	1.466
	EI Mother	-.0183	.0102	-.1580	-1.789
	FI Mother	.0020	.0032	.0506	.619
Preoccupied	AI Father	.0180	.0154	.1054	1.171
	EI Father	-.0315	.0156	-.2063	-2.015*
	FI Father	-.0178	.0196	-.0967	-.908
	AI Mother	.0050	.0149	.0309	.338
	EI Mother	-.0099	.0097	-.0905	-1.023
	FI Mother	.0020	.0030	.0551	.675
Dismissing	AI Father	-.0134	.0148	-.0843	-.907
	EI Father	-.0130	.0150	-.0916	-.866
	FI Father	.0168	.0189	.0982	.893
	AI Mother	-.0227	.0138	-.1497	-1.639
	EI Mother	.0087	.0090	.0850	.963
	FI Mother	.0032	.0029	.0916	1.122

* significant at p = .05 ** significant at p = .068

Table 13
Variable Means and Standard Deviations

Variable	Mean	Standard Deviation
Pathological Separation	121.3775	40.2184
Normal Psychological Separation		
Functional Independence from Father	32.4295	10.5115
Emotional Independence from Father	50.3851	13.0308
Attitudinal Independence from Father	27.8784	11.5963
Functional Independence from Mother	25.5962	51.3332
Emotional Independence from Mother	38.4238	17.9508
Attitudinal Independence from Mother	25.7192	12.2984
Attachment to Parents		
Paternal Care	32.5267	10.0085
Paternal Overprotectiveness	24.3810	8.1100
Maternal Care	41.3677	7.4555
Maternal Overprotectiveness	25.0200	7.5124
Family Cohesion	47.1569	10.0526
Positive Illusions		
Invulnerability	35.5490	6.4827
Omnipotence	55.9290	8.4654
Adjustment to College		
Emotional Adjustment to College	65.2745	18.0413
Social Adjustment to College	58.1699	12.0878
Adult Attachment Style		
Secure	4.6039	1.8344
Fearful	3.4744	2.0398
Preoccupied	3.1364	1.9472
Dismissing	3.8182	1.8130

Appendix B

Letter of Permission

March 27, 1996

Dear Research Participant:

You are being asked to participate in a research study. The purpose of this study is to examine the relationship between various aspects of family life, including one's relationship with parents, and how well one functions in other areas. You will be asked to respond to several questionnaires that will ask you questions about yourself and your perceptions of some of your important relationships.

You are not required to participate in this study. You will not be asked to give your name. Indeed, we are only interested in group averages, so volunteers will participate anonymously. All of the data will be numerically coded. The raw data will not be shared with anyone other than our research team, and will be held in the strictest confidence. You may ask questions at any time. You may withdraw from the study at any time without penalty. The time-of-testing should be 30-45 minutes.

If you agree to participate, please indicate your consent by signing your name below where indicated. This consent form will be kept separate from the research protocols, so there is no way for anyone's questionnaire(s) to be identified. Thank you for your interest in this project. Fee free to contact me if you have any questions.

Daniel K. Lapsley, PhD
Associate Professor

I consent to participate in the project described above.

_____

Signature of volunteer